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As filed with the Securities and Exchange Commission on April 17, 2017

Registration No. 333-216580

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

Amendment No. 1
To
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

NCS Multistage Holdings, Inc.
(Exact name of registrant as specified in its charter)

Delaware	1389	46-1527455
(State or Other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

NCS Multistage Holdings, Inc.
19450 State Highway 249, Suite 200
Houston, TX 77070
(281) 453-2222
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

P. Kevin Trautner
Executive Vice President, General Counsel and Secretary
19450 State Highway 249, Suite 200
Houston, TX 77070
(281) 453-2222
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☐

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

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

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

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

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Smaller reporting company ☐ Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed maximum offering price per share	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee
Common stock, $0.01 par value per share	10,925,000	$18.00	$196,650,000	$22,792(3)

(1) Includes 1,425,000 shares of common stock that may be issuable upon exercise of an option to purchase additional shares granted to the underwriters.
(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(a) promulgated under the Securities Act of 1933, as amended.
(3) Of this amount $11,590 has already been paid.

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

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The information in this preliminary prospectus is not complete and may be changed. Neither we nor the selling stockholders may sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated April 17, 2017

PRELIMINARY PROSPECTUS

9,500,000 Shares

NCS Multistage Holdings, Inc.

Common Stock

This is an initial public offering of common stock by NCS Multistage Holdings, Inc. We are offering 9,500,000 shares of our common stock.

Prior to this offering, there has been no public market for our common stock. It is currently estimated that the initial public offering price per share will be between $15.00 and $18.00. We have applied to have our common stock listed on the NASDAQ Global Select Market ("NASDAQ") under the symbol "NCSM."

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements. See "Prospectus Summary—Implications of Being an Emerging Growth Company."

Investing in our common stock involves risks. See "Risk Factors" beginning on page 20.

	Price to Public	Underwriting Discounts and Commissions(1)	Proceeds to NCS Multistage Holdings, Inc.
Per Share	$		
Total			

(1) We refer you to "Underwriting (Conflicts of Interest)," beginning on page 130 of this prospectus, for additional information regarding total underwriter compensation.

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

The underwriters have an option to purchase up to an additional 1,425,000 shares from the selling stockholders identified in this prospectus at the initial public offering price less the underwriting discount. We will not receive any proceeds from the sale of shares by the selling stockholders.

The underwriters expect to deliver the shares against payment in New York, New York on , 2017.

Credit Suisse **Citigroup** **Wells Fargo Securities**

J.P. Morgan **Simmons & Company International Energy Specialists of Piper Jaffray**

Raymond James **RBC Capital Markets** **Tudor, Pickering, Holt & Co.**

Prospectus dated , 2017.

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Neither we, nor the selling stockholders, nor the underwriters (or any of our or their respective affiliates) have authorized anyone to provide any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. Neither we, nor the selling stockholders, nor the underwriters (or any of our or their respective affiliates) take any responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We, the selling stockholders and the underwriters (or any of our or their respective affiliates) are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or any free-writing prospectus is only accurate as of its date, regardless of its time of delivery or the time of any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

Dealer Prospectus Delivery Obligation

Until , 2017 (25 days after the date of this prospectus), all dealers that buy, sell or trade in shares of these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Trademarks and Trade Names

We own or have the rights to use various trademarks, service marks and trade names referred to in this prospectus, including, among others, AirLock, GripShift, Mongoose, MultiCycle, Multistage Unlimited, ATRS, Vector Max, Vector-1 and NCS and their respective logos. Solely for convenience, we refer to trademarks, service marks and trade names in this prospectus without the TM, SM and ® symbols. Such references are not intended to indicate, in any way, that we will not assert, to the fullest extent permitted by law, our rights to our trademarks, service marks and trade names. Other trademarks, service marks or trade names appearing in this prospectus are the property of their respective owners.

Market and Industry Information

Unless otherwise indicated, market data and industry information used throughout this prospectus is based on management's knowledge of the industry and the good faith estimates of management. We also relied upon management's review of independent industry surveys and publications, to the extent available, as well as other publicly available information prepared by a number of sources, including Spears & Associates, BP p.l.c. and the U.S. Energy Information Administration. All of the market data and industry information used in this prospectus involves a number of assumptions and limitations and you are cautioned not to give undue weight to such estimates. Although we believe that these sources are reliable, neither we nor the underwriters can guarantee the accuracy or completeness of this information and neither we nor the underwriters have independently verified this information. While we believe the estimated market position, market opportunity and market size information included in this prospectus is generally reliable, such information, which is derived in part from management's estimates and beliefs, is inherently uncertain and imprecise. Projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors," "Cautionary Note Regarding Forward-Looking Statements" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in our estimates and beliefs and in the estimates prepared by independent parties.

PROSPECTUS SUMMARY

This summary highlights information appearing elsewhere in this prospectus. This summary is not complete and does not contain all of the information that you should consider before making a decision to participate in the offering. You should carefully read the entire prospectus before making an investment decision, including the information presented under "Risk Factors," "Cautionary Note Regarding Forward-Looking Statements," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and notes related thereto included elsewhere in this prospectus. Unless the context requires otherwise, references to "our company," "we," "us," "our" and "NCS" refer to NCS Multistage Holdings, Inc. and its direct and indirect subsidiaries on a consolidated basis. References in this prospectus to "selling stockholders" refer to those entities identified as selling stockholders in "Principal and Selling Stockholders." All dollar amounts refer to United States dollars unless otherwise indicated.

Overview

We are a leading provider of highly engineered products and support services that facilitate the optimization of oil and natural gas well completions and field development strategies. We provide our products and services primarily to exploration and production ("E&P") companies for use in onshore wells, predominantly wells that have been drilled with horizontal laterals in unconventional oil and natural gas formations. Our products and services are utilized in oil and natural gas basins throughout North America and in selected international markets, including Argentina, China and Russia. We have provided our products and services to over 140 customers in 2016, including leading large independent oil and natural gas companies and major oil companies.

Our primary offering is our Multistage Unlimited family of completion products and services, which enable efficient pinpoint stimulation: the process of individually stimulating each entry point into a formation targeted by an oil or natural gas well. Our Multistage Unlimited products and services are typically utilized in cemented wellbores and enable our customers to precisely place stimulation treatments in a more controlled and repeatable manner as compared with traditional completion techniques. Our Multistage Unlimited products and services operate in conjunction with third-party providers of pressure pumping, coiled tubing and other services.

We began providing pinpoint stimulation products and services in 2006, and since then our technology has been used in the completion of more than 7,600 wells comprising over 155,000 individual frac stages. Our initial focus on the Canadian market has resulted in our products and services being used in 26% of all horizontal wells drilled in Canada in 2016. We began our efforts to increase our penetration of the U.S. market in 2013, and the United States accounted for approximately 23% of our revenue in 2016. We are focused on increasing our market share in the United States, particularly in the Permian Basin. Sales of our products and services in the Permian Basin contributed 56% and 43% of our revenue in the United States in 2016 and 2015, respectively.

Multistage Unlimited includes our casing-installed sliding sleeves and downhole frac isolation assembly. Customers typically purchase our casing-installed sliding sleeves, a consumable product that is cemented at intervals into the casing of the wellbore, and can also utilize services associated with our downhole frac isolation assembly. Our downhole frac isolation assembly is comprised of numerous subcomponents, including a resettable bridge plug for stage isolation, a sleeve locator to efficiently locate our sliding sleeves in the wellbore, an abrasive perforating sub that can perforate the casing where our sliding sleeves are not installed and gauge packages that can measure and record downhole data. Our personnel supervise the use of the downhole frac isolation assembly during completion operations. In addition, our downhole frac isolation assembly provides valuable downhole data, including recorded downhole temperatures and pressures, which can be analyzed and used in designing future completion strategies. Further, because our downhole frac isolation assembly is deployed on coiled tubing, our customers have access to real-time downhole pressure measurements which can be used to adjust strategies during a well completion. We offer two primary models of sliding sleeves: our

GripShift sliding sleeves, which open one time, and our MultiCycle sliding sleeves, which can be opened and closed multiple times giving our customers the benefit of additional completion options and the ability to better optimize a well's production phase. We hold 23 patents related to our technology and received the *World Oil* Best Completions Technology Award in 2014 and 2015 for our Multistage Unlimited products and services and MultiCycle sliding sleeves, respectively.

We complement our proprietary products and services with our in-house expertise in completions engineering, reservoir engineering and geology. These capabilities allow us to engage with our customers on well completion design and well spacing decisions, thereby supporting our customers' completion optimization strategies and building lasting relationships. In addition, our extensive research and development efforts are influenced and driven by the needs of our customers, allowing us to introduce innovative and commercial solutions that improve customer efficiency and profitability.

Our revenue for the years ended December 31, 2016 and 2015, was $98.5 million and $114.0 million, respectively. Our net income (loss) for the years ended December 31, 2016 and 2015, was $(17.9) million and $28.0 million, respectively. Our Adjusted EBITDA for the years ended December 31, 2016 and 2015 was $13.9 million and $26.2 million, respectively. For the definition of Adjusted EBITDA and a reconciliation to its most directly comparable financial measure calculated and presented in accordance with Generally Accepted Accounting Principles ("GAAP"), please read "Summary Historical Consolidated Financial and Other Data."

Our Industry

Over the past decade, E&P companies have increasingly focused on exploiting the vast hydrocarbon reserves contained in North America's unconventional oil and natural gas reservoirs by utilizing horizontal drilling and hydraulic fracturing. According to Spears & Associates ("Spears"), in 2016, over 55% of all onshore wells drilled in the United States and over 80% of all onshore wells drilled in Canada included horizontal well sections, or laterals, an increase from 30% and 62%, respectively, in 2011. According to Spears, horizontal wells accounted for 79% of total onshore drilling and completion spending in the United States and 95% of total onshore drilling and completion spending in Canada in 2016.

The most commonly used completion technique for unconventional wells is plug and perforate, or "plug and perf." The plug and perf technique uses a tool called a perf gun to create clusters of holes, or perforations, in the casing of the wellbore. After the perf gun has been removed from the well, the formation is hydraulically fractured through the newly created clusters of perforations, connecting the wellbore to the surrounding reservoir. After the frac stage is completed, the well is temporarily plugged just above the recently stimulated section and the perforation and hydraulic fracturing process is repeated until the number of desired frac stages have been placed. This technique is most commonly applied in wells in which the well's casing or lining has been cemented in place.

"Ball drop" is another technique commonly used in open hole, or uncemented, well configurations. This technique utilizes a series of sliding sleeves pre-installed in the well's casing or lining during well construction. Rather than using a perf gun to create openings, a specially sized ball is dropped into the well prior to each stage being hydraulically fractured. The size of the ball allows it to pass through to a matching "seat" profile on a sleeve in the well, where it acts both to enable the shifting of the sleeve, exposing ports to the formation, and to plug the bottom of the wellbore, providing isolation. Ball drop systems typically rely on different ball sizes to activate the sleeves and, as a result, the wellbore will increasingly narrow toward the "toe," or furthest point in the well, and the number of sleeves and stages that can be fractured can be limited by available ball sizes.

E&P companies have increasingly adopted techniques and equipment that drive more effective resource recovery, including longer-length well laterals, closer spacing of hydraulic fracturing stages, a higher number of

stages per well and more volume of fluid and proppant used per well and per foot of lateral. Additionally, as E&P companies have begun to move toward infill and development drilling, the spacing between wells has decreased, and is expected to continue to decrease, increasing the need for more precise drilling and completion techniques.

While plug and perf and ball drop techniques have traditionally been used in unconventional well completions, these techniques have several drawbacks that limit their ability to optimize completions and maximize hydrocarbon recovery. Limitations associated with traditional well completion techniques include:

- inconsistent and uncontrollable placement of fractures that cannot be reliably repeated from stage to stage due to variable breakdown pressures, leading to under-stimulation of wells;
- inability to monitor downhole pressure or measure pressures and temperatures during stimulation, limiting control and making optimization more challenging;
- inability to close and reopen perforations and sleeves, limiting options following the initial completion; and
- completion designs that result in under-stimulation of wells to reduce the likelihood of an operational issue referred to as a “screenout,” and the associated costly recovery process.

To reduce the amount of under-stimulated reservoir area that can occur when using these traditional techniques, many E&P companies are reducing the spacing between stages, thereby increasing the number of stages per well. However, increasing stage counts with traditional completion techniques can result in other operational inefficiencies, such as increased time and expense in the case of plug and perf completions, or, in the case of ball drop completions, the inability to place the desired number of stages due to the limited number of ball and seat sizes available.

Competitive Strengths

We believe we are well positioned to achieve our business objectives based on the following competitive strengths:

- ***Patented and differentiated completions technology.*** Our value proposition is built on a foundation of patent-protected technology and industry leading technical capabilities. Our Multistage Unlimited products and services are designed to provide our customers with an enhanced degree of precision for more predictable, repeatable and verifiable well completions, in order to maximize reservoir connectivity while minimizing the impact of the completion on the productivity of offsetting wells. Our technology also provides E&P companies access to accurate real-time and recorded downhole information which can enhance completion and well spacing optimization strategies. This information is typically not available with traditional completion techniques. We believe that the benefits provided by our proprietary technology and our operating experience and know-how differentiate us from providers of traditional completion technologies, including plug and perf and ball drop, and from other pinpoint stimulation competitors.
- ***Proven record of successfully introducing new technologies that drive completion and production optimization.*** Our research and development efforts are targeted to solve customer challenges and provide solutions that improve customer efficiency and profitability. Our in-house and field engineering teams are responsible for developing new technology to expand our product and service offerings and enhance the performance of our existing products. During the recent commodity price downturn, we accelerated our investment in these efforts, adding to our pipeline for future product and service introductions. We believe we are a leader in the development of new completions technology, which is reflected in our extensive and growing suite of patent-protected products and methods. We hold 9 U.S. patents and 14 related international patents and have 40 U.S. patent applications pending and 51 related international

patents pending. We received the *World Oil* Best Completions Technology Award in 2014 and 2015 for our Multistage Unlimited products and services and MultiCycle sliding sleeves, respectively. We believe our engineering expertise, combined with our focus on completions technology, gives us a competitive advantage in designing and commercializing new completions technology. For example, we introduced our AirLock casing buoyancy system in late 2013 and this system has been utilized in over 1,650 wells since its introduction. The AirLock continues to increase its market penetration, with 50% more AirLocks sold during 2016 as compared to 2015, a time period in which the total number of horizontal wells drilled in the U.S. and Canada declined on a year-over-year basis.

- ***Market leader in pinpoint stimulation.*** We believe we are a global leader in pinpoint stimulation products and services, based on the number of wells completed using our technology and the number of stages in the wells completed using our technology. Since our founding, our products and services have been utilized by our customers for the pinpoint completion of over 7,600 wells, resulting in the placement of over 155,000 frac stages. Our experience as a leader in pinpoint stimulation has given us the opportunity to gain valuable operational insights into the use of this stimulation technique. We have used these insights to continually improve upon our existing products and to develop new products. Our products and services have been utilized in all major unconventional oil and natural gas basins in North America and in selected global markets. Our leadership in pinpoint stimulation has led to the use of our products and services in a number of wells that include what we believe to be the highest number of stages in the following basins: 147 stages in a well in the Permian Basin, 116 stages in a well in the Marcellus shale, 134 stages in a well in the Montney, 123 stages in a well in the Duvernay, 106 stages in a well in the Cardium, 60 stages in a well in the Vaca Muerta region in Argentina and 30 stages in a well in the Khantos region in Russia.
- ***Asset-light business model and strong balance sheet provide significant flexibility.*** Throughout the commodity price downturn, we have maintained attractive margins, which we believe validates our value proposition to our customers and reflects our ability to quickly adjust our cost structure. Our Adjusted EBITDA as a percentage of revenue was 14%, 23%, 43% and 46% for the years ended December 31, 2016, 2015, 2014 and 2013, respectively. Because our business is not capital intensive, we are able to generate significant free cash flow through business cycles, with free cash flow as a percentage of revenue of 9%, 3%, 18% and 8% for the years ended December 31, 2016, 2015, 2014 and 2013, respectively. However, we had a net loss of approximately $17.9 million for the year ended December 31, 2016, which was primarily due to the effects of the commodity price downturn. By focusing on downhole completion equipment and services, and not high-cost assets deployed on the surface, such as coiled tubing or pressure pumping units, our net property and equipment ("P&E") at December 31, 2016 was $9.8 million. Sales of our products, which are consumable items, represented approximately 74% and 70% of our revenue for the years ended December 31, 2016 and 2015, respectively. We believe we have a strong balance sheet and ample liquidity to pursue our growth initiatives. At the closing of this offering, we expect to have no or minimal debt outstanding and $72.3 million in liquidity from cash on hand and $50.0 million of available borrowing capacity under our New Senior Secured Credit Facility (as defined below) that we expect to enter into concurrently with the closing of this offering.
- ***Trusted advisor to a leading customer base.*** We have leveraged our extensive experience and differentiated products and services to establish strong relationships with our customers. For the last eight years, we have been the preferred completion technology provider to Crescent Point Energy ("Crescent Point"), our largest customer and one of Canada's largest independent E&P companies**.** Our technology has been vetted and chosen by some of the largest, most sophisticated energy companies in the world, resulting in a customer base that includes more than 140 customers globally, including national, major and large independent oil companies, such as Apache Corporation, Crescent Point Energy Corp., Devon Energy Corporation, Gazprom Neft PJSC, Range Resources Corporation and Royal Dutch Shell plc. We established Anderson Thompson Reservoir Strategies ("ATRS"), a team of engineering consultants, in

2015 as a complement to our products and services to provide in-house expertise to assist our customers in optimizing their completion designs and development plans and to evaluate well performance. We believe our ATRS group has deepened our relationships with existing customers, helped us add new customers and effectively demonstrated the value proposition of our pinpoint stimulation offerings. In addition, several of our customers have worked with us to develop new completion technology for specific applications, highlighting their trust in our product development capabilities and adding to our pipeline of technologies available to all of our customers.

- ***Experienced, entrepreneurial management team with strong culture of innovation.*** Our management team, led by co-founders, CEO, Robert Nipper, and President, Marty Stromquist, provides disciplined strategic direction and insight gained from multi-decade careers in the energy technology and oilfield service industries. Our founders, pioneers in pinpoint stimulation, led our company through a period of exceptional growth and provide the keystone for our culture. Our culture is defined by "The Promise," a document that guides our relationships with our employees, customers, vendors and other stakeholders and affirms our commitment to quality and safety. We maintain our culture through the ongoing coaching of our employees and continuously measure ourselves to identify areas for improvement. Together, Mr. Nipper and Mr. Stromquist, have assembled a management team with extensive backgrounds in research and development, manufacturing, operations and finance, with an average of over 25 years of industry and otherwise relevant experience.

Our Business Strategy

Our primary business objectives are to increase the adoption of our products and services in all geographies, continue to be an innovator of technology and create value for our stockholders. We intend to achieve these objectives through the execution of the following strategies:

- ***Focus on expansion in the United States while pursuing disciplined organic growth globally.*** We plan to continue to grow our business in all geographies in which we operate, with our current emphasis on profitably expanding our presence in the United States. We increased our efforts to target the U.S. market in 2013 and believe we can increase our share in all basins in the United States as our customers focus on optimizing completion designs in an effort to increase overall hydrocarbon recovery and improve financial returns from their assets. In 2016 the United States accounted for approximately 23% of our revenue. We continue to focus on growing our presence in the Permian Basin, the most active basin in the United States, which accounted for 56% of our revenue in the United States during the year ended December 31, 2016. During 2016, we expanded into a larger operational facility in Midland, Texas and directed additional sales efforts to customers operating in the Permian Basin. Outside of the United States, we plan to increase our market position in several deep basin plays in Canada, including the Montney formation, where we currently have lower, but growing, market shares relative to other regions in Canada. We also plan to increase our market position in Argentina, China, and Russia, regions where we have successful operations and which have significant unconventional resource development potential.
- ***Develop and introduce innovative technologies that are aligned with customer needs.*** Our team of over 30 engineers and engineering technicians works closely with our technical services organization and our customers to identify specific product and service needs, develop business cases and bring new technology to market on an expedited basis. Collaborating with our customers allows us to identify unaddressed industry-wide needs and to develop new technologies, of which we have several under development. By introducing new technologies, we expand our product and service portfolio, grow our customer base and leverage our current customer relationships to generate additional revenue. We believe we have established strong working relationships with our customers, and we are collaborating with several of our customers on solutions for specific onshore and offshore completions needs, with NCS retaining the rights to the intellectual property derived from these projects. We expect to continue to work with our customers on specific solutions to supplement our in-house technology development efforts.

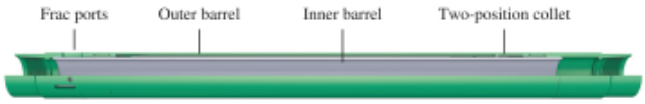
- ***Leverage technology leadership to grow market share.*** Our extensive experience, differentiated offerings and focus on responding to evolving customer needs has allowed us to establish strong relationships with our customers. Over the years we have added in-house capabilities that provide additional value-added expertise and services to our customers, including completions engineering and ATRS. We believe that by focusing on customer service, while continuing to introduce innovative completions solutions, we can strengthen our relationships with existing customers, grow our customer base and increase our revenues. We believe the benefits provided by our technology and our expertise position us to continue to increase our penetration of large independent and major oil companies. We believe these customers are typically more consistent in their capital budgeting, operate in multiple geographies and in many cases are focused on evaluating and deploying technology that can improve well performance. We believe that our ability to pair our in-house expertise, together with the data that is available through our Multistage Unlimited products and services have been key factors enabling us to increase our business with these customers, which represented 45% of our revenue for the year ended December 31, 2016, as compared with 47% and 37% for the years ended December 31, 2015 and 2014, respectively.
- ***Maintain financial strength and flexibility.*** We expect to continue to employ a disciplined financial policy that maintains our financial strength and flexibility. We have maintained our financial flexibility by taking actions designed to preserve positive cash flows, minimize capital expenditures and reduce debt levels. We believe our resulting financial strength and flexibility provides us with the ability to execute our strategy through industry volatility and commodity price cycles, as evidenced by our performance throughout the recent commodity price downturn. For example, during the downturn we were able to leverage our supply chain through initiatives to reduce the number of vendors in our manufacturing operations, as well as reduce our manufacturing costs for certain products by over 30%, which has supported our gross margin. We believe that our cash on hand, expected borrowing capacity and ability to access debt and equity capital markets after this offering, combined with our ability to generate free cash flow, will provide the financial flexibility required to execute our growth strategies.
- ***Selectively pursue complementary acquisitions and joint ventures.*** We believe there is an opportunity to enhance our existing product and service capabilities and geographic scope by selectively pursuing acquisitions and joint ventures. We intend to target strategic acquisitions that will enhance our market position and provide opportunities for synergies. We believe that being a public company will allow us to target a broader range of acquisition candidates.

Our Products and Services

We provide products and services that enable pinpoint stimulation: the process of individually stimulating each entry point into a formation targeted by an oil or natural gas well. We believe that our products and services improve on traditional completion techniques. Our solutions and refined field processes are designed to enable efficient, controlled, verifiable and repeatable completions. We complement our multistage completion products and services with other efficiency-enhancing completions technologies and our multi-disciplinary engineering capabilities. Our key products and services include:

- ***Multistage Unlimited.*** Our Multistage Unlimited family of products and services encompasses our technology developed to enable efficient pinpoint stimulation and re-stimulation strategies. This suite of products is comprised of our casing-installed sliding sleeves and our downhole frac isolation assemblies, which are deployed using coiled tubing. Our services include advising customers on optimizing completion designs and operating the downhole frac isolation assemblies.
  - ***Casing-installed sliding sleeves.*** Our casing-installed sliding sleeves are a consumable product, sold to our customers and cemented in place in a well's casing. Over 112,000 of our casing-installed sliding sleeves have been installed, including over 30,000 of our MultiCycle sliding sleeves. We produce two primary models of sliding sleeves: our GripShift sliding sleeves, which can be opened only once, and

our MultiCycle sliding sleeves, introduced in late 2013, which can be opened and closed multiple times throughout the life of a well. The image below illustrates one of our MultiCycle sliding sleeves. During completion operations, the downhole frac isolation assembly is placed in the sleeve and the inner barrel of the sleeve is shifted down, exposing the frac ports to the formation, allowing the completion of that stage to begin.



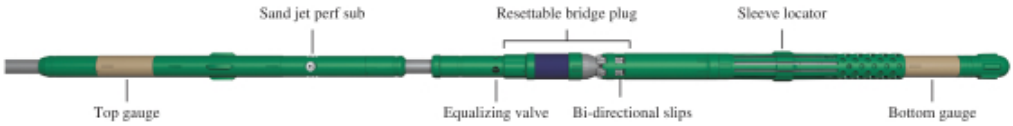
Key features of both primary models of our sliding sleeves include:

- no practical limitation on the number of stages in a well;
- a full-drift inner-diameter that is the same as the wellbore's casing, with no plugs or ball seats to mill or drill out;
- designed for use in cemented or open-hole wellbores; and
- a cumulative sleeve shifting success rate of over 99%.

Additionally, our MultiCycle sliding sleeves provide the ability to:

- close the sleeves immediately following the completion of a stage to mitigate proppant flowback, enhancing conductivity and reducing the need for post-completion well cleanouts;
- close off zones producing high levels of water or unwanted natural gas;
- execute high rate, pinpoint refracturing strategies; and
- support the conversion of a producing well to an injector well for enhanced oil recovery ("EOR") strategies, including floods and pressure maintenance.

- ***Downhole frac isolation assembly.*** Our proprietary downhole frac isolation assembly is comprised of several subcomponents. The assembly is primarily used to locate our sliding sleeves, to establish wellbore isolation and to shift our sliding sleeves open or closed. We typically own the assemblies and utilize them in our service to our customers. Our personnel operate the assemblies during completion operations in coordination with other on-site service providers. The image below illustrates a downhole frac isolation assembly designed for use with our MultiCycle sliding sleeves.



Key features of our downhole frac isolation assembly include:

- a resettable bridge plug enabling the completion of all stages in a well without having to remove the assembly from the wellbore;
- an abrasive perforating subassembly, which can be utilized to add stages to a well with sliding sleeves installed or as the method to establish formation access in wells not utilizing our sleeves;
- gauge packages located above and below the resettable bridge plug that record pressure and temperature data;

- benefits associated with having coiled tubing in the wellbore, including real-time bottom-hole pressure measurements, the ability to circulate fluids to the stage being completed and the ability to mitigate screenouts; and
- a range of configurations allowing a variety of pinpoint stimulation and refracturing strategies.

- ***Anderson Thompson Reservoir Strategies.*** Our specialized team of engineering consultants advises customers on optimized completion designs and field development strategies and evaluates well performance. ATRS helps us strengthen our relationships with our customers and has been effective at demonstrating the benefits of our Multistage Unlimited products and services as compared to traditional completion techniques.
- ***AirLock casing buoyancy system.*** Our AirLock casing buoyancy system facilitates landing casing strings in horizontal wells without altering a customer's preferred casing and cementing operations. The AirLock, which is installed with a well's casing, allows the vertical casing section to be filled with fluid, while the lateral section remains air-filled and buoyant. The enhanced buoyancy significantly reduces sliding friction, while the enhanced weight of the vertical section provides the force needed to push the casing to the toe of the well, ensuring the casing reaches the desired depth and reducing casing running time and cost.
- ***Liner hanger systems.*** Introduced in late 2014, our proprietary Vector Max and Vector-1 liner hanger systems are specifically designed to perform in complex horizontal wells and are fully compatible with our Multistage Unlimited products. The liner hanger is used to distribute the loads and weight of the liner to the supporting casing.

Implications of Being an Emerging Growth Company

As a company with less than $1.0 billion in gross revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). An emerging growth company may take advantage of specified reduced reporting and other regulatory requirements for up to five years that are otherwise applicable generally to public companies. These provisions include, among other matters:

- requirement to present only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations in a Registration Statement on Form S-1;
- exemption from the auditor attestation requirement on the effectiveness of our system of internal control over financial reporting;
- exemption from the adoption of new or revised financial accounting standards until they would apply to private companies;
- exemption from compliance with any new requirements adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotation or a supplement to the auditor's report in which the auditor would be required to provide additional information about the audit and the financial statements of the issuer;
- exemption from the requirement to seek non-binding advisory votes on executive compensation and golden parachute arrangements; and
- reduced disclosure about executive compensation arrangements.

We will remain an emerging growth company until the end of the fiscal year following the fifth anniversary of this offering unless, prior to that time, we have more than $1.0 billion in annual gross revenue, have a market

value for our common stock held by non-affiliates of more than $700 million as of the last day of our second fiscal quarter of the fiscal year and a determination is made that we are deemed to be a "large accelerated filer," as defined in Rule 12b-2 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or issue more than $1.0 billion of non-convertible debt over a three-year period, whether or not issued in a registered offering.

We have availed ourselves of the reduced reporting obligations with respect to audited financial statements and related Management's Discussion and Analysis of Financial Condition and Results of Operations and executive compensation disclosure in this prospectus and expect to continue to avail ourselves of the reduced reporting obligations available to emerging growth companies in future filings. We plan to comply with new and revised accounting standards on the relevant dates on which adoption of those standards is required for non-emerging growth companies. Our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

As a result of our decision to avail ourselves of certain provisions of the JOBS Act, the information that we provide may be different than what you may receive from other public companies in which you hold an equity interest. In addition, it is possible that some investors will find our common stock less attractive as a result of our elections, which may cause a less active trading market for our common stock and more volatility in our stock price.

Risks Associated With Our Business

Investing in our common stock involves a number of risks. These risks represent challenges to the successful implementation of our strategy and the growth of our business, which could cause a decrease in the price of our common stock and a loss of all or part of your investment. Some of these risks are:

- Our business depends on the oil and natural gas industry and particularly on the level of exploration and production activity within Canada and the United States, and the ongoing decline in prices for oil and natural gas have had, and may continue to have, a material adverse effect on our business, financial condition and results of operations.
- A single customer constituted approximately 26% and 31% of our revenue for the years ended December 31, 2016 and 2015, respectively and the loss of that customer or any other of our significant customers, or their failure to pay the amounts they owe us, could cause our revenue to decline substantially.
- Advancements in drilling and well completion technologies could have a material adverse effect on our business, financial condition, results of operations and cash flows.
- We often have long sales cycles, which can result in significant time between initial contact with a prospective customer and sales of our products and services to that customer, making it difficult to project when, if at all, we will obtain new customers and when we will generate revenue from those customers.
- Our success depends on our ability to develop and implement new technologies, products and services.
- Our products are used in operations that are subject to potential hazards inherent in the oil and natural gas industry and, as a result, we are exposed to potential liabilities that may affect our financial condition and reputation.
- We may be adversely affected by disputes regarding intellectual property rights and the value of our intellectual property rights is uncertain.
- The adoption of climate change legislation or regulations restricting emissions of greenhouse gases ("GHGs") could result in increased operating costs and reduced demand for oil and natural gas.

- We are controlled by funds (the "Advent Funds"), managed by Advent International Corporation ("Advent"), whose interests may differ from those of our public stockholders.

For a discussion of these and other risks you should consider before making an investment in our common stock, see the section entitled "Risk Factors."

Our Private Equity Sponsor

Founded in 1984, Advent has invested in more than 320 private equity transactions in 40 countries and as of December 31, 2016, had $41.2 billion in assets under management. Advent's current portfolio is comprised of investments across five sectors—Retail, Consumer & Leisure; Financial and Business Services; Industrial; Technology, Media & Telecoms; and Healthcare. The Advent team includes more than 190 investment professionals across Europe, North America, Latin America and Asia.

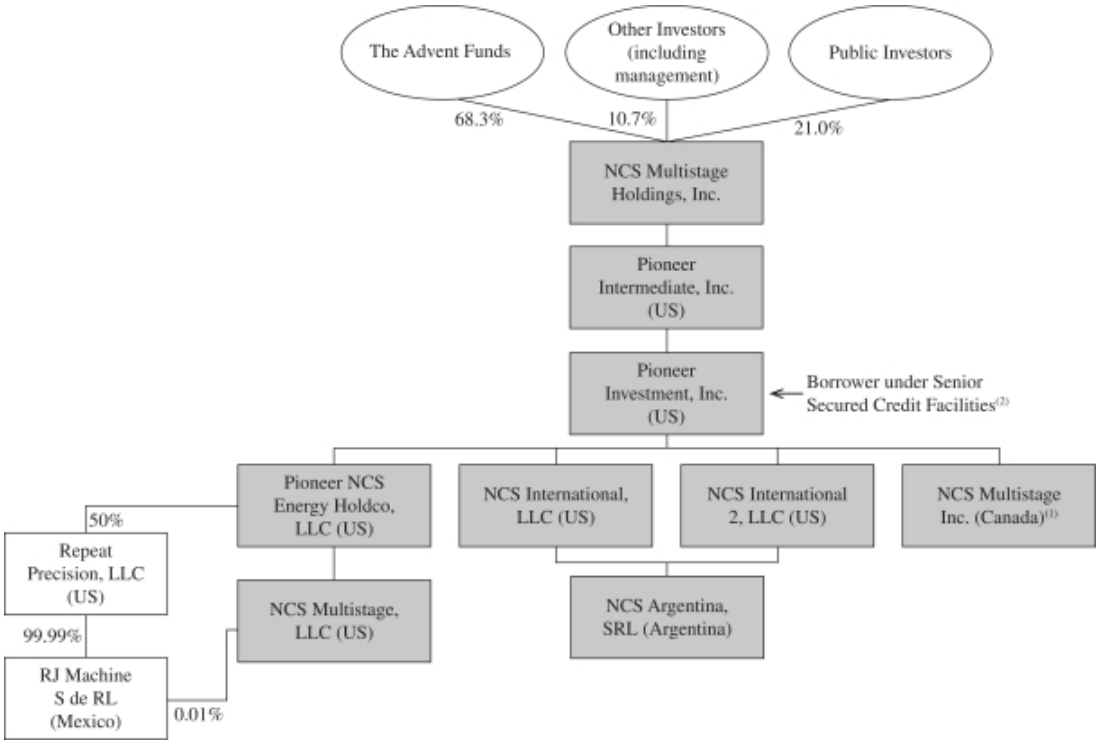
Following the closing of this offering, the Advent Funds are expected to own approximately 68.3% of our outstanding common stock, or 65.3%, if the underwriters' option to purchase additional shares is fully exercised. As a result, Advent will be able to exercise significant voting influence over fundamental and significant corporate matters and transactions. We are also a party to certain other agreements with the Advent Funds and certain of their affiliates. See "Risk Factors—Risks Relating to This Offering and Ownership of Our Common Stock," "Principal and Selling Stockholders" and "Certain Relationships and Related Party Transactions."

Corporate Information

We were incorporated in Delaware on November 28, 2012, under the name "Pioneer Super Holdings, Inc." On December 13, 2016, we changed our name to "NCS Multistage Holdings, Inc." Our principal executive offices are located at 19450 State Highway 249, Suite 200, Houston, TX 77070, and our telephone number is (281) 453-2222. Our corporate website address is www.ncsmultistage.com. Our website and the information contained on, or that can be accessed through, the website is not deemed to be incorporated by reference in, and is not considered part of, this prospectus.

Our Corporate Structure

The following chart illustrates our ownership structure after this offering:



(1) Certain holders of equity in NCS Multistage Inc. (Canada) hold an exchange right to convert 1,819,247 shares of common stock of NCS Multistage Inc. (Canada) for 1,819,247 shares of our common stock.

(2) In connection with this offering, we intend to enter into a New Senior Secured Credit Facility (as defined below), NCS Multistage Holdings, Inc. and Pioneer Intermediate, Inc. will both be parent guarantors under the New Senior Secured Credit Facility and Pioneer Investment, Inc. and NCS Multistage Inc. will be borrowers under the New Senior Secured Credit Facility.

Preliminary Estimate of Selected First Quarter 2017 Financial Results

Although our results of operations for the three months ended March 31, 2017 are not yet final, the following unaudited information reflects our preliminary estimates of selected results based on information currently available to management.

We have prepared these estimates on a materially consistent basis with the financial information presented elsewhere in this prospectus and in good faith based upon our current internal reporting as of and for the three months ended March 31, 2017. These estimated ranges are preliminary and unaudited and are thus inherently uncertain and subject to change as we complete our financial results as of and for the three months ended March 31, 2017. We are in the process of completing our customary quarterly close and review procedures as of and for the three months ended March 31, 2017, and there can be no assurance that our final results for this period will not differ from these estimates. During the preparation of our consolidated financial statements and

related notes as of and for the three months ended March 31, 2017, we may identify items that cause our final reported results to be materially different from the preliminary financial estimates presented herein as a result of various factors, including those that are set forth under the headings “Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements.”

These estimates should not be viewed as a substitute for full interim financial statements prepared in accordance with GAAP. In addition, these estimates for the three months ended March 31, 2017 are not necessarily indicative of the results to be achieved for the remainder of 2017 or any future period. Our consolidated financial statements and related notes as of and for the three months ended March 31, 2017 are not expected to be filed with the SEC until after this offering is completed. The preliminary financial data included in this registration statement has been prepared by, and is the responsibility of, our management. PricewaterhouseCoopers LLP has not audited, reviewed, compiled, or performed any procedures with respect to the preliminary financial data. Accordingly, PricewaterhouseCoopers LLP does not express an opinion or any other form of assurance with respect thereto.

Based on currently available information, we estimate, on a preliminary basis, that revenue will be within a range of $57.0 million to $59.0 million for the three months ended March 31, 2017, as compared to $23.1 million for the same period in 2016. This increase was primarily attributable to an increase in the sale of our completions products and services due to higher drilling and well completion activity as a result of an improved commodity price environment in the first quarter of 2017 as compared to the first quarter of 2016.

Based on currently available information, we sold more than 17,000 sleeves during the three months ended March 31, 2017, as compared to 7,117 sleeves for the same period in 2016 and we were involved in the completion of more than 450 customer wells during the three months ended March 31, 2017 as compared to 259 customer wells for the same period in 2016.

Based on currently available information, we also estimate, on a preliminary basis, that net income will be within a range of $5.7 million to $7.7 million for the three months ended March 31, 2017, as compared to a net loss of $8.1 million for the same period in 2016. The improved results were primarily attributable to the factors discussed above.

In addition, based on currently available information, we estimate, on a preliminary basis, that Adjusted EBITDA will be within a range of $17.8 million to $19.8 million for the three months ended March 31, 2017, as compared to $2.7 million for the same period in 2016. The increase primarily related to increases in revenues during the first quarter of 2017 as compared to the first quarter of 2016, as discussed above, partially offset by increases in our cost of revenue and operating expense.

EBITDA and Adjusted EBITDA are not financial measures presented in accordance with GAAP. We define EBITDA as net income (loss) before interest expense, net, income tax expense (benefit) and depreciation and amortization. We define Adjusted EBITDA as EBITDA adjusted to exclude certain items which we believe are not reflective of ongoing performance, including (i) non-cash items, such as share-based compensation expense, the amortization of intangible assets recorded as a result of the Advent Transaction, described in more detail in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and realized and unrealized gains associated with fluctuations in foreign currency exchange rates and (ii) charges that do not relate to our operations, such as interest expense, and income tax provision. We believe that presenting Adjusted EBITDA enables investors to assess our performance from period to period using the same metric utilized by management and to evaluate our performance relative to other companies that are not subject to such factors. Adjusted EBITDA is also calculated in a manner consistent with the terms of the instruments governing our Senior Secured Credit Facilities (and the anticipated terms of our New Senior Secured Credit Facility).

EBITDA and Adjusted EBITDA are not defined under GAAP, are not measures of net income, income from operations or any other performance measure derived in accordance with GAAP, and are subject to important limitations. Our use of the terms EBITDA and Adjusted EBITDA may not be comparable to similarly titled measures of other companies in our industry and are not measures of performance calculated in accordance with GAAP. EBITDA and Adjusted EBITDA have important limitations as analytical tools and you should not consider them in isolation or as substitutes for analysis of our financial performance as reported under GAAP and they should not be considered as alternatives to net income (loss) or any other performance measures derived in accordance with GAAP as measures of operating performance or as alternatives to cash flow from operating activities as measures of our liquidity. For example, EBITDA and Adjusted EBITDA, among other things:

- exclude certain tax payments that may represent a reduction in cash available to us;
- do not reflect any cash capital expenditure requirements for the assets being depreciated and amortized that may have to be replaced in the future;
- do not reflect changes in, or cash requirements for, our working capital needs; and
- do not reflect the significant interest expense, or the cash requirements necessary to service interest or principal payments, on our debt.

Because of these limitations, EBITDA and Adjusted EBITDA should not be considered as measures of discretionary cash available to us to invest in the growth of our business. We compensate for these limitations by relying primarily on our GAAP results and using EBITDA and Adjusted EBITDA only for supplemental purposes.

The following table presents a reconciliation of EBITDA and Adjusted EBITDA to the GAAP financial measure of net income (loss) for the three months ended March 31, 2017 (estimated) and 2016 (actual):

	Quarter Ended March 31,		
	2017		2016
	Low	High	Actual
	(in thousands)		
Net income (loss)	$ 5,738	$ 7,738	$(8,126)
Income tax expense (benefit) (a)	1,685	1,685	(3,458)
Interest expense	1,509	1,509	1,466
Depreciation	563	563	452
Amortization	6,022	6,022	5,771
EBITDA	15,517	17,517	(3,895)
Share based compensation (b)	337	337	331
Restructuring charges (c)	—	—	103
Board fees and expenses (d)	265	265	125
Professional fees (e)	1,791	1,791	76
Unrealized foreign currency loss (f)	79	79	5,904
Realized foreign currency loss (gain) (g)	698	698	(26)
Other (h)	(855)	(855)	72
Adjusted EBITDA	$17,832	$19,832	$ 2,690

(a) Represents estimated income tax expense at mid-point of range.
(b) Represents non-cash compensation charges related to share-based compensation granted to our officers, employees and directors.
(c) Represents severance and other expenses associated with headcount reductions and other cost savings initiated as part of our restructuring initiatives.
(d) Represents Board fees and travel expenses paid to members of our Board, which is an adjustment permitted by the terms of our Senior Secured Credit Facilities.

(e) Represents costs of professional services incurred in connection with our initial public offering, refinancings and the evaluation of proposed acquisitions.
(f) Represents unrealized foreign currency translation gains and losses primarily in respect of our indebtedness.
(g) Represents realized foreign currency translation gains and losses with respect to principal and interest payments related to our indebtedness.
(h) Represents the impact of a research and development subsidy that is included in income tax benefit in accordance with GAAP, fees incurred in connection with refinancing our credit facilities, arbitration awards and other charges and credits.

Concurrent Refinancing

Concurrently with the closing of this offering, we and certain of our subsidiaries intend to enter into an Amended and Restated Credit Agreement (the "Credit Agreement") with the lenders party thereto, Wells Fargo Bank, National Association and Wells Fargo Bank, National Association, Canadian Branch, as administrative agents and the other parties thereto (the facilities provided thereunder, the "New Senior Secured Credit Facility"). The New Senior Secured Credit Facility consists of revolving credit facilities in aggregate principal amount of $50.0 million. The closing of this offering is not conditioned on consummation of the concurrent refinancing of our credit facilities. We cannot assure you that the refinancing will be completed or, if completed, on what terms it will be completed. See "Description of Material Indebtedness—New Senior Secured Credit Facility."

THE OFFERING

Issuer	NCS Multistage Holdings, Inc.
Common stock offered by us	9,500,000 shares of common stock.
Common stock to be outstanding after this offering	45,325,225 shares of common stock.
Option to purchase additional shares of common stock	The underwriters have an option to purchase an additional 1,425,000 shares of common stock from the selling stockholders. The underwriters can exercise this option at any time within 30 days from the date of this prospectus.
Use of proceeds	We estimate that the net proceeds from the sale of our common stock in this offering, after deducting the underwriting discount and estimated offering expenses payable by us, will be approximately $144.8 million based on an assumed initial public offering price of $16.50 per share (the midpoint of the price range set forth on the cover of this prospectus). We will not receive any proceeds from the sale of shares by the selling stockholders. We intend to use these net proceeds to repay indebtedness under our Senior Secured Credit Facilities and use the remainder for general corporate purposes. See “Use of Proceeds.”
Conflicts of interest	Because a repayment of the outstanding borrowings under our Senior Secured Credit Facilities could result in at least 5% of the net proceeds of this offering being paid to an affiliate of an underwriter who is a lender under our Senior Secured Credit Facilities, this offering is being made in compliance with the requirements of Rule 5121 of the Financial Industry Regulatory Authority, Inc. (“FINRA”), which requires a “qualified independent underwriter,” as defined by the FINRA rules, to participate in the preparation of the registration statement and the prospectus and exercise the usual standards of due diligence in respect thereto, and Credit Suisse Securities (USA) LLC has served in that capacity and will not receive any additional fees for serving as qualified independent underwriter in connection with this offering. We have agreed to indemnify Credit Suisse Securities (USA) LLC against liabilities incurred in connection with acting as a qualified independent underwriter, including liabilities under the Securities Act. To comply with FINRA Rule 5121, Citigroup Global Markets Inc., Wells Fargo Securities, LLC and J.P. Morgan Securities LLC will not confirm sales to any account over which they exercise discretionary authority without the specific written approval of the transaction of the account holder. For more information, see “Underwriting (Conflicts of Interest).”

Dividend policy	We do not anticipate paying any dividends on our common stock for the foreseeable future; however, we may change this policy in the future. See “Dividend Policy.”
Directed share program	At our request, the underwriters have reserved for sale, at the initial public offering price, up to 475,000 shares of common stock, or approximately 5% of the shares offered by us in this prospectus, for sale to our directors and directors of our joint venture with one of our suppliers. If these individuals purchase reserved shares of common stock, this will reduce the number of shares of common stock available for sale to the public. Any reserved shares of common stock that are not so purchased will be offered by the underwriters to the public on the same terms as the other shares of common stock offered by this prospectus. For further information regarding our directed share program, see “Underwriting (Conflicts of Interest)—Directed Share Program.”
Risk factors	Investing in our common stock involves a high degree of risk. See the “Risk Factors” section of this prospectus beginning on page 19 for a discussion of factors you should carefully consider before investing in our common stock.
Listing	We have applied to have our common stock listed on NASDAQ under the symbol “NCSM.”

Except as otherwise indicated, the number of shares of our common stock outstanding after this offering:

- excludes 3,112,548 shares of our common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of $5.10 per share;
- excludes an aggregate of 4,532,523 shares of our common stock that will be available for future equity awards under our 2017 Equity Incentive Plan (the “2017 Plan”);
- gives effect to a 3.00 for 1.00 stock split of our common stock that was effected on April 13, 2017;
- gives effect to the exchange of 1,819,247 shares of common stock of NCS Multistage, Inc. (Canada) that were offered as consideration in connection with Advent’s acquisition of NCS Energy Holdings, LLC (“HoldCo”) in 2012 for 1,819,247 shares of our common stock. See “Certain Relationships and Related Party Transactions—Cemblend Transactions”;
- gives effect to our amended and restated certificate of incorporation and our amended and restated bylaws, which will be in effect prior to the consummation of this offering; and
- assumes the underwriters do not exercise their option to purchase additional shares from the selling stockholders.

Unless otherwise indicated, this prospectus assumes an initial public offering price of $16.50 per share (the midpoint of the price range set forth on the cover of this prospectus).

SUMMARY HISTORICAL CONSOLIDATED FINANCIAL AND OTHER DATA

The following tables set forth our summary historical consolidated financial and other data for the periods and as of the dates indicated. We derived the summary consolidated statement of operations data and the consolidated statement of cash flows data for the years ended December 31, 2016 and 2015 from the audited consolidated financial statements and related notes thereto included elsewhere in this prospectus. We derived the consolidated balance sheet data as of December 31, 2016 from the audited consolidated financial statements and related notes thereto included elsewhere in this prospectus. We derived the summary consolidated statement of operations data and consolidated statement of cash flows data for the years ended December 31, 2014 and 2013 from our audited consolidated financial statements and related notes thereto not included in this prospectus.

Our historical results are not necessarily indicative of future operating results. You should read the information set forth below together with "Selected Historical Consolidated Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Capitalization" and our consolidated financial statements and the related notes thereto included elsewhere in this prospectus.

	Year Ended December 31,			
	2016	2015	2014	2013
	(in thousands, except share and per share amounts and operating data)			
Consolidated Statement of Operations Data:				
Revenues:				
Product sales	$ 73,220	$ 80,079	$ 162,728	$ 92,194
Services	25,259	33,926	57,278	40,456
Total revenues	98,479	114,005	220,006	132,650
Cost of sales:				
Cost of product sales, exclusive of depreciation and amortization expense shown below	40,511	40,160	61,863	31,327
Cost of services, exclusive of depreciation and amortization expense shown below	13,322	14,553	20,785	16,133
Total cost of sales, exclusive of depreciation and amortization expense shown below	53,833	54,713	82,648	47,460
Selling, general and administrative expenses	37,061	37,804	50,088	26,239
Depreciation	1,766	2,695	1,969	1,417
Amortization	23,801	24,576	27,922	29,726
(Loss) income from operations	(17,982)	(5,783)	57,379	27,808
Other income (expenses)				
Interest expense, net	(6,286)	(8,064)	(7,420)	(6,021)
Prepayment penalty on debt extinguishments	—	—	—	(2,500)
Other income (expense), net	45	(131)	(361)	396
Foreign currency exchange (loss) gain	(2,522)	25,779	8,981	(226)
Total other (expense) income	(8,763)	17,584	1,200	(8,351)
(Loss) income before income tax	(26,745)	11,801	58,579	19,457
Income tax expense (benefit)	(8,818)	(16,224)	50,931	11,475
Net (loss) income	$ (17,927)	$ 28,025	$ 7,648	$ 7,982
Net (loss) income per share:				
Basic	$ (0.53)	$ 0.88	$ 0.24	$ 0.25
Diluted(1)	$ (0.53)	$ 0.86	$ 0.24	$ 0.25
Weighted average shares outstanding:				
Basic	34,007,505	29,965,946	29,804,608	29,783,294
Diluted(1)	34,007,505	32,432,919	32,194,309	32,069,691

	Year Ended December 31,			
	2016	2015	2014	2013
	(in thousands, except operating data)			
Consolidated Statement of Cash Flows Data:				
Net cash provided by (used in):				
Operating activities	$ 10,684	$ 4,369	$ 51,452	$ 16,261
Investing activities	(1,840)	(1,221)	(12,917)	(5,854)
Financing activities	(315)	(12,766)	(24,216)	(4,754)
Other Data:				
Adjusted EBITDA(2)	$ 13,880	$ 26,219	$ 95,569	$ 60,711
Free Cash Flow(3)	$ 8,844	$ 3,148	$ 38,535	$ 10,407
Number of wells completed	892	1,135	1,807	1,274
Number of sleeves sold	25,816	24,395	37,610	21,851

	As of December 31, 2016	
	Actual	As Adjusted(4)
	(in thousands)	
Consolidated Balance Sheet Data:		
Cash and cash equivalents	$ 18,275	$ 72,250
Totals assets	326,827	380,802
Total debt, net	89,166	—
Total liabilities	149,349	60,183
Total stockholders' equity	177,478	320,619

(1) The diluted weighted average shares outstanding amount excludes the impact of options which would be anti-dilutive.

(2) We report our financial results in accordance with GAAP. To supplement this information, we have included supplemental non-GAAP financial measures in this prospectus, including EBITDA and Adjusted EBITDA.

EBITDA is defined as net income (loss) before interest expense, net, income tax expense (benefit) and depreciation and amortization.

Adjusted EBITDA is defined as EBITDA adjusted to exclude certain items which we believe are not reflective of ongoing performance or which, in the case of share-based compensation, are non-cash in nature. We were purchased in a leveraged buyout. Given the debt included in our capital structure, and the application of purchase price accounting which resulted in the recognition of our assets at fair value, including substantial amounts of amortizable intangible assets, we recognize high levels of interest expense and non-cash amortization charges on an ongoing basis. We believe that Adjusted EBITDA is an important measure that excludes many of the costs associated with our existing capital structure and excludes costs that management believes do not reflect our ongoing operating performance. Accordingly, Adjusted EBITDA is a key metric that management uses to assess the period-to-period performance of our core business operations. Adjusted EBITDA helps to identify trends in the performance of our core on going operations by excluding the effects related to (i) non-cash items, such as share-based compensation expense, the amortization of intangible assets recorded as a result of the Advent Transaction, described in more detail in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and realized and unrealized gains associated with fluctuations in foreign currency exchange rates and (ii) charges that do not relate to our operations, such as interest expense, and income tax provision. We believe that presenting Adjusted EBITDA enables investors to assess our performance from period to period using the same metric utilized by management and to evaluate our performance relative to other companies that are not subject to such factors. Adjusted EBITDA is also calculated in a manner consistent with the terms of the instruments governing our Senior Secured Credit Facilities (and the anticipated terms of our New Senior Secured Credit Facility).

EBITDA and Adjusted EBITDA are not defined under GAAP, are not measures of net income, income from operations or any other performance measure derived in accordance with GAAP, and are subject to important limitations. Our use of the terms EBITDA and Adjusted EBITDA may not be comparable to similarly titled measures of other companies in our industry and are not measures of performance calculated in accordance with GAAP. EBITDA and Adjusted EBITDA have important limitations as analytical tools and you should not consider them in isolation or as substitutes for analysis of our financial performance as reported under GAAP and they should not be considered as alternatives to net (loss) income or any other performance measures derived in accordance with GAAP as measures of operating performance or as alternatives to cash flow from operating activities as measures of our liquidity. For example, EBITDA and Adjusted EBITDA, among other things:

- exclude certain tax payments that may represent a reduction in cash available to us;
- do not reflect any cash capital expenditure requirements for the assets being depreciated and amortized that may have to be replaced in the future;
- do not reflect changes in, or cash requirements for, our working capital needs; and
- do not reflect the significant interest expense, or the cash requirements necessary to service interest or principal payments, on our debt.

Because of these limitations, EBITDA and Adjusted EBITDA should not be considered as measures of discretionary cash available to us to invest in the growth of our business. We compensate for these limitations by relying primarily on our GAAP results and using EBITDA and Adjusted EBITDA only for supplemental purposes.

A reconciliation of net income (loss), the most directly comparable GAAP measure, to EBITDA and from EBITDA to Adjusted EBITDA on a consolidated basis for the periods indicated is as follows:

	Year Ended December 31,			
	2016	2015	2014	2013
	(in thousands)			
Net (loss) income	$(17,927)	$ 28,025	$ 7,648	$ 7,982
Income tax expense (benefit)	(8,818)	(16,224)	50,931	11,475
Interest expense	6,286	8,064	7,420	6,021
Depreciation	1,766	2,695	1,969	1,417
Amortization	23,801	24,576	27,922	29,726
EBITDA	5,108	47,136	95,890	56,621
Share based compensation(a)	1,354	1,313	1,293	1,335
Restructuring charges(b)	277	430	—	—
Board fees and expenses(c)	541	520	515	512
Professional Fees(d)	3,079	306	704	1,108
Dividends treated as compensation(e)	—	—	3,036	—
Unrealized foreign currency (gain) loss(f)	2,612	(12,787)	(8,690)	—
Realized foreign currency (gain) loss(g)	(89)	(12,992)	(291)	226
Other(h)	998	2,293	3,112	909
Adjusted EBITDA	$ 13,880	$ 26,219	$95,569	$60,711

(a) Represents non-cash compensation charges related to share-based compensation granted to our officers, employees and directors.
(b) Represents severance and other expenses associated with headcount reductions and other cost savings initiated as part of our restructuring initiatives.
(c) Represents Board fees and travel expenses paid to members of our Board, which is an adjustment permitted by the terms of our Senior Secured Credit Facilities.
(d) Represents costs of professional services incurred in connection with our initial public offering, refinancings and the evaluation of proposed acquisitions.
(e) Represents cash payments made to certain holders of (i) options to purchase our common stock and (ii) holders of shares of Exchangeco (as defined below). The cash payment was a result of a dividend paid to our stockholders in August 2014 as described under "Certain Relationships and Related Party Transactions—Dividend."
(f) Represents unrealized foreign currency translation gains and losses primarily in respect of our indebtedness.
(g) Represents realized foreign currency translation gains and losses with respect to principal and interest payments related to our indebtedness.
(h) Represents the impact of a research and development subsidy that is included in income tax benefit in accordance with GAAP, fees incurred in connection with refinancing our credit facilities, miscellaneous asset writeoffs and other charges and credits.

(3) We define free cash as net cash provided by (used in) operating activities less net cash provided by (used in) investing activities. A reconciliation of net cash provided by (used in) operating activities, the most directly comparable GAAP measure, to free cash flow for the periods indicated is as follows:

	Year ended December 31,			
	2016	2015	2014	2013
	(in thousands)			
Net cash provided by operating activities	$10,684	$ 4,369	$ 51,452	$16,261
Net cash (used in) investing activities	(1,840)	(1,221)	(12,917)	(5,854)
Free Cash Flow	$ 8,844	$ 3,148	$ 38,535	$10,407

(4) We present certain information on an as adjusted basis to give effect to the sale by us of 9,500,000 shares of common stock in this offering at an initial public offering price of $16.50 per share, the midpoint of the price range set forth on the cover of this prospectus, less estimated underwriting discounts and commissions and estimated expenses and the application of the net proceeds to be received by us from this offering.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully the following risks and all of the information in this prospectus, including our historical financial statements and related notes thereto, included elsewhere in this prospectus, before purchasing our common stock. If any of the following risks actually occur, our business, financial condition and results of operations could be materially adversely affected. In that case, the trading price of our common stock could decline, perhaps significantly and you may lose all or part of your investment.

Risks Related to Our Business and the Oil and Natural Gas Industry

Our business depends on the oil and natural gas industry and particularly on the level of exploration and production activity within Canada and the United States, and the ongoing decline in prices for oil and natural gas have had, and may continue to have, a material adverse effect on our business, financial condition and results of operations.

Demand for our products and services depends substantially on the level of expenditures by companies in the oil and natural gas industry. The significant decline in oil and natural gas prices during 2015 has continued during the first part of 2016. The low commodity price environment has caused a reduction in the drilling, completion and other production activities of most of our customers and their spending on our products and services. Although the prices for oil have recently improved, this overall trend with respect to our customers' activities and spending continued in 2016. The reduction in demand from our customers has reduced the prices we can charge our customers for our products and services. These conditions have had and may continue to have a material adverse effect on our business, financial condition and results of operations, and it is difficult to predict how long the current low commodity price environment will continue.

Many factors over which we have no control affect the supply of and demand for, and our customers' willingness to explore, develop and produce oil and natural gas, and therefore, influence demand levels and prices for our products and services, including:

- the domestic and foreign supply of and demand for oil and natural gas;
- the level of prices, and expectations about future prices, of oil and natural gas;
- the level of global oil and natural gas exploration and production;
- the cost of exploring for, developing, producing and delivering oil and natural gas;
- the expected decline rates of current production;
- the price and quantity of foreign imports;
- political and economic conditions in oil producing countries, including the Middle East, Africa, South America and Russia;
- the ability of members of the Organization of Petroleum Exporting Countries to agree to and maintain oil price and production controls;
- speculative trading in crude oil and natural gas derivative contracts;
- the level of consumer product demand;
- the discovery rates of new oil and natural gas reserves;
- contractions in the credit market;
- the strength or weakness of the U.S. dollar;
- available pipeline and other transportation capacity;
- the levels of oil and natural gas storage;

- weather conditions and other natural disasters;
- political instability in oil and natural gas producing countries;
- domestic and foreign tax policy;
- domestic and foreign governmental approvals and regulatory requirements and conditions;
- the continued threat of terrorism and the impact of military and other action, including military action in the Middle East;
- technical advances affecting energy demand, generation and consumption;
- the proximity and capacity of oil and natural gas pipelines and other transportation facilities;
- alternative fuel requirements or technological advances and the demand and availability of alternative fuel sources;
- fuel conservation measures;
- the ability of oil and natural gas producers to raise equity capital and debt financing;
- merger and divestiture activity among oil and natural gas producers; and
- overall domestic and global economic conditions.

These factors and the volatility of the energy markets make it difficult to predict future oil and natural gas price movements with any certainty or how long the current low commodity price environment will continue. Any of the above factors could impact the level of oil and natural gas exploration and production activity and could have a material adverse effect on our business, financial condition and results of operations. Further, should the low commodity price environment continue or worsen, we could encounter difficulties such as an inability to access needed capital on attractive terms or at all, the incurrence of asset impairment charges, an inability to meet the financial ratios contained in our debt agreements, a need to reduce our capital spending and other similar impacts any of which could have a material adverse effect on our business, financial condition and results of operations.

The cyclicality of the oil and natural gas industry may cause our results of operations to fluctuate.

We derive our revenues from companies in the oil and natural gas exploration and production industry, a historically cyclical industry with levels of activity that are significantly affected by the levels and volatility of oil and natural gas prices. Prices for oil and natural gas historically have been extremely volatile and are expected to continue to be volatile. During the past six years, the posted WTI price for oil has ranged from a low of $26.21 per barrel, or Bbl, in February 2016 to a high of $113.93 per Bbl in April 2011. Over the same period, the Henry Hub spot market price of natural gas has ranged from a low of $1.49 per MMBtu in March 2016 to a high of $7.92 per MMBtu in March 2014. During 2016, WTI prices ranged from $26.21 to $54.06 per Bbl and the Henry Hub spot market price of natural gas ranged from $1.49 to $3.80 per MMBtu. On February 11, 2016, the WTI posted price for crude oil was $26.21 per Bbl and the Henry Hub spot market price of natural gas was $2.12 per MMBtu, representing decreases of approximately 57% and 36%, respectively, from the high of $61.43 per Bbl of oil and $3.29 per MMBtu for natural gas during 2015. We have, and may in the future, experience significant fluctuations in operating results as a result of the reactions of our customers to changes in oil and natural gas prices. For example, prolonged low commodity prices experienced by the oil and natural gas industry during 2015 and 2016, combined with adverse changes in the capital and credit markets, caused many E&P companies to reduce their capital budgets and drilling activity. This resulted in a significant decline in demand for oilfield services and adversely impacted the prices oilfield services companies could charge for their services. We have master services agreements (“MSAs”) with most of our customers which have no minimum purchase requirements. As a result, most of our customers are not obligated to buy our products or utilize our services for an extended period or at all.

The recent low commodity price environment has negatively impacted oil and natural gas E&P companies and, in some cases, impaired their ability to timely pay for products or services provided or resulted in their insolvency or bankruptcy, any of which exposes us to credit risk of our oil and natural gas exploration and production customers.

In weak economic and commodity price environments, we may experience increased difficulties, delays or failures in collecting outstanding receivables from our customers, due to, among other reasons, a reduction in their cash flow from operations, their inability to access the credit markets and, in certain cases, their insolvencies. Such increases in collection issues could have a material adverse effect on our business, financial condition and results of operations.

To the extent one or more of our key customers commences bankruptcy proceedings, our contracts with these customers may be subject to rejection under applicable provisions of the United States Bankruptcy Code, or may be renegotiated. Further, during any such bankruptcy proceeding, prior to assumption, rejection or renegotiation of such contracts, the bankruptcy court may temporarily authorize the payment of value for our services less than contractually required, which could also have a material adverse effect on our business, financial condition and results of operations.

A single customer constituted 26% of our revenues in 2016 and 31% of our revenues in 2015 and the loss of that customer or any other of our significant customers, or their failure to pay the amounts they owe us, could cause our revenue to decline substantially.

Our largest customer is Crescent Point which accounted for approximately 26% and 31% of our revenue for the years ended December 31, 2016 and 2015, respectively. Additionally, our top five customers accounted for approximately 49% and 44% of our revenue for the years ended December 31, 2016 and 2015, respectively. It is likely that we will continue to derive a significant portion of our revenue from these customers in the near future. If any of these customers decided not to continue to use our products and services, our revenue would decline, which could have a material adverse effect on our business, financial condition and results of operations. In addition, we are subject to credit risk due to the concentration of our customer base. Any nonperformance by these customers, including their failure to pay the amounts they owe us, either as a result of changes in general financial and economic conditions, conditions in the oil and natural gas industry or otherwise, could have a material adverse effect on our business, financial condition and results of operations.

We may not be able to successfully implement our strategy of increasing sales of our products and services for use in basins located in the United States.

A key component of our growth strategy is to increase our market share in the United States. Our products and services enable pinpoint stimulation of an oil or natural gas well. Currently, most E&P companies in the United States rely on traditional well completion techniques and do not utilize pinpoint stimulation. We may not be successful in convincing potential customers of the benefits of our technologies relative to traditional well completion techniques. If we are unable to convince potential customers in the United States of the benefits of our pinpoint stimulation, we will not be able to execute on our strategy to increase the level of sales of our products and services in the United States, which could harm our growth prospects. Additionally, the sales of our products and services depend in large part on the perception of pinpoint stimulation in the oil and natural gas industry. Events that would harm the perception of pinpoint stimulation, including unfavorable industry reports or poor well performance for wells that were completed using pinpoint stimulation could impact our ability to grow our U.S. sales, which could harm our growth prospects.

Competition within our industry may adversely affect our ability to market our services.

The markets in which we operate are generally highly competitive. The principal competitive factors in our market are technology, service quality, safety track record and price. We compete with large national and multi-national companies that have substantially longer operating histories, greater financial, technical and other resources and greater name recognition than we do. Several of our competitors provide a broader array of

services and have a stronger presence in more geographic markets. In addition, we compete with several smaller companies capable of competing effectively on a regional or local basis. Our competitors may be able to respond more quickly to new or emerging technologies, products and services and changes in customer requirements. In certain circumstances, work is awarded on a bid basis, which further increases competition based on price. Pricing is often the primary factor in determining which qualified contractor is awarded the work. The competitive environment may be further intensified by mergers and acquisitions among oil and natural gas companies or other events that have the effect of reducing the number of available customers. As a result of competition, we may lose market share or be unable to maintain or increase prices for our present services or to acquire additional business opportunities, which could have a material adverse effect on our business, financial condition and results of operations.

Advancements in drilling and well completion technologies could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our industry is characterized by rapid and significant technological advancements and introductions of new products and services using new technologies. As new well completion technologies develop, we may be placed at a competitive disadvantage, and competitive pressure may force us to implement new technologies at a substantial cost. We may not be able to successfully acquire or use new technologies. New technologies, services or standards, including improvements to existing competing technologies, could render our technologies, products or services obsolete, which could have a material adverse effect on our business, financial condition and results of operations. In addition, the development of new processes to replace hydraulic fracturing altogether or that replace our technologies, could cause a decline in the demand for the products and services that we provide and could result in a material adverse effect on our business, financial condition and results of operations.

We often have long sales cycles, which can result in significant time between initial contact with a prospective customer and sales of our products and services to that customer, making it difficult to project when, if at all, we will obtain new customers and when we will generate revenue from those customers.

Our sales cycle, from initial contact to sales of our products and services to a customer can take significant time. Our sales efforts involve educating our customers about the use, technical capabilities and benefits of our completion technologies. Some of our customers undertake an evaluation process that frequently involves not only our technology but also the offerings of our competitors. As a result, it is difficult to predict when we will obtain new customers and begin generating revenue from these new customers. As a result, we may not be able to add customers, or generate revenue, as quickly as we may expect, which could harm our growth prospects.

Our success depends on our ability to develop and implement new technologies, products and services.

Our success depends on the ongoing development and implementation of new product designs and improvements, and on our ability to protect and maintain critical intellectual property assets related to these developments. If we are not able to obtain patent or other intellectual property protection of our technology, we may not be able to recoup development costs or fully exploit systems, services and technologies in a manner that allows us to meet evolving industry requirements at prices acceptable to our customers. In addition, some of our competitors are large national and multinational companies that may be able to devote greater financial, technical, manufacturing and marketing resources to research and development of new systems, services and technologies than we are able to do.

Investments in new technologies involve uncertainties and risk. Commercial success depends on many factors, including the levels of innovation, the development costs and the availability of capital resources to fund those costs, the levels of competition from others developing similar or other competing technologies, our ability to obtain or maintain government permits or certifications, the effectiveness of production, distribution and marketing efforts, and the costs to customers to deploy and provide support for the new technologies. We may not achieve significant revenues from new product and service investments for a number of years, if at all, which could have a material adverse effect on our business, financial condition and results of operations.

Most of our revenue generated is denominated in the Canadian dollar and could be negatively impacted by currency fluctuations.

Because approximately 71% of our revenue for the year ended December 31, 2016 was generated in Canada, we could be materially affected by currency fluctuations. Changes in currency exchange rates, particularly with respect to the Canadian dollar, could have a material adverse effect on our results of operations or financial position. As we have a trade accounts receivable balance in Canadian dollars ("CAD") of $26.9 million CAD as of December 31, 2016 a 10% increase in the strength of the Canadian dollar versus the U.S. dollar would result in an increase in pre-tax income of approximately $2.0 million. Conversely, a corresponding decrease in the strength of the Canadian dollar would have resulted in a comparable decrease in pre-tax income. We have not hedged our exposure to changes in foreign currency exchange rates and, as a result, could incur significant and unanticipated translation gains and losses.

Our operations may be limited or disrupted in certain parts of the continental United States and Canada during severe weather conditions, which could have a material adverse effect on our business, financial condition and results of operations.

We provide products and services to E&P companies that operate in basins throughout the continental United States and Canada. We serve these markets through our facilities and service centers located in Texas and Alberta, Canada. A substantial portion of our revenue is generated from our operations in geographies where weather conditions may be severe, particularly during winter and spring months. Repercussions of severe weather conditions may include:

- curtailment of drilling and completion activity;
- weather-related damage to equipment resulting in suspension of operations;
- weather-related damage to our facilities;
- inability to deliver equipment and materials to jobsites in accordance with contract schedules; and
- loss of productivity.

Many municipalities impose bans or other restrictions on the use of roads and highways, which include weight restrictions on the paved roads that lead to our jobsites due to the muddy conditions caused by spring thaws. This can limit our access to these jobsites and our ability to service wells in these areas. These constraints and the resulting shortages or high costs could delay our operations and materially increase our operating and capital costs in those regions. Weather conditions may also affect the price of crude oil and natural gas, and related demand for our services. Any of these factors could have a material adverse effect on our business, financial condition and results of operations.

Hydraulic fracturing is substantially dependent on the availability of water. Restrictions on the ability of our customers to obtain water may have a material adverse effect on our business, financial condition and results of operations.

Water is an essential component of deep shale oil and natural gas production during both the drilling and hydraulic fracturing processes. Over the past several years, certain of the areas in which we sell our products and services have experienced extreme drought conditions and competition for water in such shales is growing. As a result of this severe drought, some local water districts have begun restricting the use of water subject to their jurisdiction for hydraulic fracturing to protect local water supply. The inability of our customers to obtain water to use in their operations from local sources or to effectively utilize flowback water could impact demand for our products and services, which could have a material adverse effect on our business, financial condition and results of operations.

The growth of our business through acquisitions or strategic partnerships exposes us to various risks, including identifying suitable opportunities and integrating businesses, assets and personnel.

We expect to pursue future acquisitions in order to expand and diversify our business. We may also form strategic partnerships with third parties that we believe will complement or augment our existing business. We may not be able to identify any potential acquisition or strategic partnership candidates, consummate any acquisitions or enter into any strategic partnerships and any future acquisitions or strategic partnerships may not be successfully integrated or may not be advantageous to us. In addition, we may not have or be able to obtain sufficient capital resources to complete any acquisitions. Entities we acquire may not achieve the revenue and earnings we anticipate or their liabilities may exceed our expectations. We could face integration issues pertaining to the internal controls and operational functions of the acquired companies and we also could fail to realize cost efficiencies or synergies that we anticipated when selecting our acquisition candidates. Client dissatisfaction or performance problems with a particular acquired entity or resulting from a strategic partnership could have a material adverse effect on our reputation as a whole. We may be unable to profitably manage any acquired entities, or we may fail to integrate them successfully without incurring substantial expenses, delays or other problems. We may not achieve the anticipated benefits from our acquisitions or any of the strategic partnerships we form. In addition, business acquisitions and strategic partnerships involve a number of risks that could affect our business, financial condition and results of operations, including but not limited to:

- our ability to integrate operational, accounting and technology policies, processes and systems and the implementation of those policies and procedures;
- our ability to integrate personnel and human resources systems as well as the cultures of each of the acquired businesses;
- our ability to implement our business plan for the acquired business;
- transition of operations, users and clients to our existing platforms or the integration of data, systems and technology platforms with ours;
- compliance with regulatory requirements and avoiding potential conflicts of interest in markets that we serve;
- diversion of management’s attention and other resources;
- our ability to retain or replace key personnel;
- our ability to maintain relationships with the customers of the acquired business or a strategic partner and further develop the acquired business or the business of our strategic partner;
- our ability to cross-sell our products and services of the acquired businesses or strategic partners to our respective clients;
- entry into unfamiliar markets;
- assumption of unanticipated legal or financial liabilities and/or negative publicity related to prior acts by the acquired entity;
- litigation or other claims in connection with the acquired company, including claims from terminated employees, clients, former stockholders or third parties;
- misuse of intellectual property by our strategic partners;
- disagreements with strategic partners or a misalignment of incentives within any strategic partnership;
- becoming subject to increased regulation or a result of an acquisition;
- becoming significantly leveraged as a result of incurring debt to finance an acquisition;
- unanticipated operating, accounting or management difficulties in connection with the acquired entities; and

- impairment of acquired intangible assets, including goodwill, and dilution to our earnings per share.

If we fail to successfully integrate the businesses that we acquire or strategic partnerships that we enter into, we may not realize any of the benefits we anticipate in connection with the acquisitions or partnerships, which could have a material adverse effect on our business, financial condition and results of operations.

If we are unable to accurately predict customer demand or if customers cancel their orders on short notice, we may hold excess or obsolete inventory, which would reduce gross margins. Conversely, insufficient inventory would result in lost revenue opportunities and potentially in loss of market share and damaged customer relationships.

Customers can generally cancel or defer purchase orders on short notice without incurring a significant penalty. As a result, we cannot accurately predict what or how many products such customers will need in the future. Anticipating demand is difficult because our customers face unpredictable demand for their own products and are increasingly focused on cash preservation and tighter inventory management.

Orders are placed with our suppliers based on forecasts of customer demand and, in some instances, we may establish buffer inventories to accommodate anticipated demand. Our forecasts of customer demand are based on multiple assumptions, each of which may introduce errors into the estimates. If we overestimate customer demand, we may allocate resources to the purchase of material or manufactured products that we may not be able to sell when we expect to, if at all. As a result, we would hold excess or obsolete inventory, which would reduce gross margin and adversely affect financial results. Conversely, if we underestimate customer demand or if insufficient manufacturing capacity is available, we would miss revenue opportunities and potentially lose market share and damage our customer relationships. In addition, any future significant cancellations or deferrals of product orders or the return of previously sold products could materially and adversely affect profit margins, increase product obsolescence and restrict our ability to fund our operations.

Our products are used in operations that are subject to potential hazards inherent in the oil and natural gas industry, including claims for personal injury and property damage, and, as a result, we are exposed to potential liabilities that may affect our financial condition and reputation.

Our products are used in potentially hazardous drilling, completion and production applications in the oil and natural gas industry where an accident or a failure of a product can potentially have catastrophic consequences. Risks inherent to these applications, such as equipment malfunctions and failures, equipment misuse and defects, explosions, blowouts and uncontrollable flows of oil, natural gas or well fluids and natural disasters can cause personal injury, loss of life, suspension of operations, damage to formations, damage to facilities, business interruption and damage to or destruction of property, surface water and drinking water resources, equipment and the environment. If our products or services fail to meet specifications or are involved in accidents or failures, we could face warranty, contract or other litigation claims, which could expose us to substantial liability for personal injury, wrongful death, property damage, pollution and other environmental damages. We operate with most of our customers under MSAs. We endeavor to allocate potential liabilities and risks between the parties in the MSAs. Generally, under our MSAs, we assume responsibility for, including control and removal of, pollution or contamination which originates above surface and originates from our equipment or services. Our customer assumes responsibility for, including control and removal of, all other pollution or contamination which may occur during operations, including that which may result from seepage or any other uncontrolled flow of drilling fluids. We may have liability in such cases if we are negligent or commit willful acts.

Generally, our customers also agree to indemnify us against claims arising from their employees' personal injury or death to the extent that, in the case of our hydraulic fracturing operations, their employees are injured or their properties are damaged by such operations, unless resulting from our gross negligence or willful misconduct. Similarly, we generally agree to indemnify our customers for liabilities arising from personal injury

to or death of any of our employees, unless resulting from gross negligence or willful misconduct of the customer. In addition, our customers generally agree to indemnify us for loss or destruction of customer-owned property or equipment and in turn, we agree to indemnify our customers for loss or destruction of property or equipment we own. Losses due to catastrophic events, such as blowouts, are generally the responsibility of the customer. However, despite this general allocation of risk, we might not succeed in enforcing such contractual allocation, might incur an unforeseen liability falling outside the scope of such allocation or may be required to enter into an MSA with terms that vary from the above allocations of risk. As a result, we may incur substantial losses which could have a material adverse effect on our business, financial condition and results of operations.

In addition, the frequency and severity of such incidents will affect operating costs, insurability and relationships with customers, employees and regulators. In particular, our customers may elect not to purchase our services if they view our safety record as unacceptable, which could cause us to lose customers and substantial revenues. In addition, these risks may be greater for us because we may acquire companies that have not allocated significant resources and management focus to safety and have a poor safety record requiring rehabilitative efforts during the integration process and we may incur liabilities for losses before such rehabilitation occurs.

Losses and liabilities from uninsured or underinsured drilling and operating activities could have a material adverse effect on our financial condition and operations.

Our insurance policies may not be adequate to cover all liabilities. Further, insurance may not be generally available in the future or, if available, insurance premiums may make such insurance commercially unjustifiable. Moreover, even if we are successful in defending a claim, it could be time-consuming and costly to defend. The operational insurance coverage we maintain for our business may not fully insure us against all risks, either because insurance is not available or because of the high premium costs relative to perceived risk. Further, any insurance obtained by us may not be adequate to cover any losses or liabilities and this insurance may not continue to be available at all or on terms which are acceptable to us. Insurance rates have in the past been subject to wide fluctuation and changes in coverage could result in less coverage, increases in cost or higher deductibles and retentions. Liabilities for which we are not insured, or which exceed the policy limits of our applicable insurance, could have a material adverse effect on our business, financial condition and results of operations.

Our competitors may infringe upon, misappropriate, violate or challenge the validity or enforceability of our intellectual property and we may not be able to adequately protect or enforce our intellectual property rights in the future.

We currently hold multiple U.S. and international patents and have multiple pending patent applications for products and processes. Patent rights give the owner of a patent the right to exclude third parties from making, using, selling, and offering for sale the inventions claimed in the patents in the applicable country. Patent rights do not necessarily grant the owner of a patent the right to practice the invention claimed in a patent, but merely the right to exclude others from practicing the invention claimed in the patent. It may be possible for a third-party to design around our patents. Furthermore, patent rights have strict territorial limits. We may not be able to enforce our patents against infringement occurring in “non-covered” territories. Also, we do not have patents in every jurisdiction in which we conduct business and our patent portfolio will not protect all aspects of our business and may relate to obsolete or unusual methods, which would not prevent third parties from entering the same market.

In addition, by customarily entering into employment, confidentiality and/or license agreements with our employees, customers and potential customers and suppliers, we attempt to limit access to and distribution of our technology. Our rights in our confidential information, trade secrets, and confidential know-how will not prevent third parties from independently developing similar information. Publicly available information (e.g. information in expired issued patents, published patent applications, and scientific literature) can also be used by third parties to independently develop technology. This independently developed technology may be equivalent or superior to our proprietary technology.

Confidential information shared with employees, customers and potential customers and suppliers may be used by those parties in a manner inconsistent with their employment, confidentiality and/or license agreements and we may not be able to adequately protect against or stop such behavior. We may not be able to determine if competitive technology offered by third parties was independently developed or resulted from breach of our agreements. When we do become aware of breaches, we may become involved in legal proceedings from time to time to protect our legal interests and enforce such agreements.

We may be adversely affected by disputes regarding intellectual property rights and the value of our intellectual property rights is uncertain.

As discussed above, we may become involved in legal proceedings from time to time to protect and enforce our intellectual property rights. Third parties from time to time may initiate litigation against us by asserting that the conduct of our business infringes, misappropriates or otherwise violates intellectual property rights. We may not prevail in any such legal proceedings related to such claims, and our products and services may be found to infringe, impair, misappropriate, dilute or otherwise violate the intellectual property rights of others. If we are sued for infringement and lose, we could be required to pay substantial damages and/or be enjoined from using or selling the infringing products or technology. Any legal proceeding concerning intellectual property could be protracted and costly and is inherently unpredictable and could have a material adverse effect on our business, financial condition and results of operation, regardless of its outcome.

Further, our intellectual property rights may not have the value that management believes them to have and such value may change over time as we and others develop new product designs and improvements.

The adoption of climate change legislation or regulations restricting emissions of GHGs could result in increased operating costs and reduced demand for oil and natural gas.

In recent years, federal, state and local governments have taken steps to reduce emissions of GHGs. The Environmental Protection Agency (“EPA”) has finalized a series of GHG monitoring, reporting and emissions control rules for the oil and natural gas industry. For example, in October 2015, the EPA finalized rules adding new sources to the scope of the GHG monitoring and reporting rule. These new sources include gathering and boosting facilities as well as completions and workovers of hydraulically fractured wells. More recently, in June 2016, the EPA published final rules establishing new and more stringent methane and volatile organic compounds (“VOCs”) emissions control requirements for oil and natural gas development and production operations.

While Congress has from time to time considered legislation to reduce emissions of GHGs, there has not been significant activity in the form of adopted legislation to reduce GHG emissions at the federal level in recent years. In the absence of federal climate legislation, a number of state and regional efforts have emerged that are aimed at tracking or reducing GHG emissions by means of cap and trade programs. In addition, in December 2015, the United States joined the international community at the 21st Conference of the Parties of the United Nations Framework Convention on Climate Change in Paris, France. The resulting Paris Agreement calls for the parties to undertake “ambitious efforts” to limit the average global temperature, and to conserve and enhance sinks and reservoirs of GHGs. The Paris Agreement, which entered into force on November 4, 2016, establishes a framework for the parties to cooperate and report actions to reduce GHG emissions.

Restrictions on emissions of methane or carbon dioxide that may be imposed could adversely affect the oil and natural gas industry by reducing demand for hydrocarbons and by making it more expensive to develop and produce hydrocarbons, either of which could have a material adverse effect on future demand for our products and services. At this time, it is not possible to accurately estimate how potential future laws or regulations addressing GHG emissions would impact our or our customers’ business.

In addition, claims have been made against certain energy companies alleging that GHG emissions from oil and natural gas operations constitute a public nuisance under federal and/or state common law. As a result,

private individuals may seek to enforce environmental laws and regulations against certain energy companies and could allege personal injury or property damages. While our business is not a party to any such litigation, we could be named in actions making similar allegations. An unfavorable ruling in any such case could significantly impact our or our customers' operations and could have a material adverse effect on our business, financial condition and results of operations.

Moreover, climate change may cause more extreme weather conditions such as more intense hurricanes, thunderstorms, tornadoes and snow or ice storms, as well as rising sea levels and increased volatility in seasonal temperatures. Extreme weather conditions can interfere with our or our customers' operations and increase our costs, and damage resulting from extreme weather may not be fully insured. However, at this time, we are unable to determine the extent to which climate change may lead to increased storm or weather hazards affecting our operations.

Federal and state legislative and regulatory initiatives relating to hydraulic fracturing could result in increased costs and additional operating restrictions or delays on our customers which could in turn decrease the demand for our products and services.

Our business is dependent on the ability of our customers to conduct hydraulic fracturing and horizontal drilling activities. Hydraulic fracturing is an important common practice that is used to stimulate production of hydrocarbons, particularly natural gas, from tight formations, including shales. The process, which involves the injection of water, sand and other proppants under pressure into formations to fracture the surrounding rock and stimulate production, is typically regulated by state oil and natural gas commissions. However, federal agencies have asserted regulatory authority over certain aspects of the process. In March 2015, the Bureau of Land Management (the "BLM") published a final rule that established new or more stringent standards relating to hydraulic fracturing on federal and American Indian lands. A Wyoming federal judge struck down this final rule in June 2016, finding that the BLM lacked authority to promulgate the rule. That decision is currently being appealed by the federal government.

There are certain governmental reviews either completed, underway, or being proposed that focus on the environmental aspects of hydraulic fracturing practices. These completed, ongoing, or proposed studies, depending on their degree of pursuit and whether any meaningful results are obtained, could spur initiatives to further regulate hydraulic fracturing. For example, in December 2016, the EPA released a final report assessing the potential impacts of hydraulic fracturing on drinking water resources. In this report, the EPA found scientific evidence that hydraulic fracturing activities can impact drinking water resources under some circumstances. Other governmental agencies, including the U.S. Department of Energy, the U.S. Geological Survey and the U.S. Government Accountability Office, have evaluated or are evaluating various other aspects of hydraulic fracturing. State and federal regulatory agencies recently have focused on a possible connection between the operation of injection wells used for oil and natural gas waste disposal and seismic activity. Similar concerns have been raised that hydraulic fracturing may also contribute to seismic activity. When caused by human activity, such events are called induced seismicity. Regulatory agencies at all levels are continuing to study the possible linkage between oil and natural gas activity and induced seismicity. These ongoing or proposed studies could spur initiatives to further regulate hydraulic fracturing, and could ultimately make it more difficult or costly to perform fracturing and increase the costs of compliance and doing business for our customers. In addition, in response to concerns regarding induced seismicity, regulators in some states have from time to time, developed and implemented plans directing certain wells where seismic incidents have occurred to restrict or suspend disposal well operations. Such actions to restrict or suspend disposal well operations could make it more difficult or costly for our customers to perform fracturing.

Various state and local-level initiatives in regions with substantial shale resources have been or may be proposed or implemented to further regulate hydraulic fracturing practices, limit water withdrawals and water use, require disclosure of fracturing fluid constituents, restrict which additives may be used, or implement temporary or permanent bans on hydraulic fracturing. For instance, the State of New York elected in 2015 to

prohibit high volume hydraulic fracturing altogether. Any increased regulation of hydraulic fracturing could reduce our customers' demand for our products and services and have a material adverse effect on our business, financial condition and results of operations.

At this time, it is not possible to estimate the impact on our business of newly enacted or potential federal, state or local laws governing hydraulic fracturing.

Our operations and our customers' operations are subject to a variety of governmental laws and regulations that may increase our costs, limit the demand for our products and services or restrict our operations.

Our business and our customers' businesses may be significantly affected by:

- federal, state and local and non-U.S. laws and other regulations relating to oilfield operations, worker safety and protection of the environment;
- changes in these laws and regulations; and
- the level of enforcement of these laws and regulations.

If we fail to comply with safety regulations or maintain an acceptable level of safety at our facilities we may incur fines, penalties or other liabilities, or may be held criminally liable. We may incur additional costs to upgrade equipment or conduct additional training, or otherwise incur costs in connection with compliance with safety regulations. Failure to maintain safe operations or achieve certain safety performance metrics could disqualify us from doing business with certain customers, particularly major oil companies.

In addition, we depend on the demand for our products and services from the oil and natural gas industry. This demand is affected by changing taxes, price controls and other laws and regulations relating to the oil and natural gas industry in general. For example, the adoption of laws and regulations curtailing exploration and development drilling for oil and natural gas for economic or other policy reasons could adversely affect our operations by limiting demand for our products. In addition, some non-U.S. countries may adopt regulations or practices that give advantage to indigenous oil companies in bidding for oil leases, or require indigenous companies to perform oilfield services currently supplied by international service companies. To the extent that such companies are not our customers, or we are unable to develop relationships with them, our business may suffer. We cannot determine the extent to which our future operations and earnings may be affected by new legislation, new regulations or changes in existing regulations.

Because of our non-U.S. operations and sales, we are subject to changes in regional, political or economic conditions, and non-U.S. laws and policies, including taxes, trade protection measures, and changes in regulatory requirements governing the operations of companies in non-U.S. countries. We are also subject to changes in non-U.S. laws and regulations that may encourage or require hiring of local contractors or require non-U.S. contractors to employ citizens of, or purchase supplies from, a particular jurisdiction. If we fail to comply with any applicable law or regulation, it could have a material adverse affect on our business, financial condition and results of operations.

Loss of our information and computer systems could adversely affect our business.

We are heavily dependent on our information systems and computer based programs, including our engineering information and accounting data. If any of such programs or systems were to fail or create erroneous information in our hardware or software network infrastructure, whether due to cyber-attack or otherwise, possible consequences include our loss of communication links and inability to automatically process commercial transactions or engage in similar automated or computerized business activities. Any such consequence could have a material adverse effect on our business, financial condition and results of operations.

We are subject to cyber security risks. A cyber incident could occur and result in information theft, data corruption, operational disruption and/or financial loss.

The oil and natural gas industry has become increasingly dependent on digital technologies to conduct certain processing activities. For example, we depend on digital technologies to perform many of our services and process and record financial and operating data. At the same time, cyber incidents, including deliberate attacks or unintentional events, have increased. The United States government has issued public warnings that indicate that energy assets might be specific targets of cyber security threats. Our technologies, systems and networks, and those of our customers, vendors, suppliers and other business partners, may become the target of cyberattacks or information security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of proprietary and other information, or other disruption of its business operations. In addition, certain cyber incidents, such as surveillance, may remain undetected for an extended period. Our systems and insurance coverage for protecting against cyber security risks may not be sufficient. As cyber incidents continue to evolve, we may be required to expend additional resources to continue to modify or enhance our protective measures or to investigate and remediate any vulnerability to cyber incidents. Our insurance coverage for cyberattacks may not be sufficient to cover all the losses we may experience as a result of such cyberattacks.

Our business operations in countries outside of the United States are subject to a number of U.S. federal laws and regulations, including restrictions imposed by the Foreign Corrupt Practices Act as well as trade sanctions administered by the Office of Foreign Assets Control ("OFAC") and the Commerce Department.

Local laws and customs in many countries differ significantly from those in the United States. In many countries, particularly in those with developing economies, it is common to engage in business practices that are prohibited by U.S. regulations applicable to us. The United States Foreign Corrupt Practices Act ("FCPA") and similar anti-bribery laws in other jurisdictions, including the UK Bribery Act 2010, prohibit corporations and individuals, including us and our employees, from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. We are responsible for any violations by our employees, contractors and agents, whether based within or outside of the United States, for violations of the FCPA. We may also be held responsible for any violations by an acquired company that occur prior to an acquisition, or subsequent to the acquisition but before we are able to institute our compliance procedures. In addition, our non-U.S. competitors that are not subject to the FCPA or similar laws may be able to secure business or other preferential treatment in such countries by means that such laws prohibit with respect to us. A violation of any of these laws, even if prohibited by our policies, could have a material adverse effect on our business, financial condition or results of operation. Actual or alleged violations could damage our reputation, be expensive to defend, and impair our ability to do business.

Compliance with U.S. regulations on trade sanctions and embargoes administered by OFAC also poses a risk to us. We cannot provide products or services to certain countries subject to U.S. trade sanctions. Furthermore, the laws and regulations concerning import activity, export recordkeeping and reporting, export control and economic sanctions are complex and constantly changing. Any failure to comply with applicable legal and regulatory trading obligations could result in criminal and civil penalties and sanctions, such as fines, imprisonment, debarment from governmental contracts, seizure of shipments and loss of import and export privileges.

We may have difficulty managing growth in our business, which could have a material adverse effect on our business, financial condition and results of operations.

Any significant growth, if achieved, could place a significant strain on our financial, technical, operational and management resources. As we expand the scope of our activities and our geographic coverage through organic growth, acquisitions and strategic partnerships, there will be additional demands on our financial, technical, operational and management resources. The failure to continue to upgrade our technical, administrative, operating and financial control systems or the occurrences of unexpected expansion difficulties,

including the failure to recruit and retain experienced managers, engineers and other professionals, could have a material adverse effect on our business, financial condition and results of operations.

Our success may depend on the continued service and availability of key personnel.

Our success and future growth is dependent upon the ability of our executive officers, senior managers and other key personnel to operate and manage our business and execute on our growth strategies successfully. We may be unable to continue to attract and retain our executive officers, senior managers or other key personnel. We may incur increased expenses in connection with the hiring, promotion, retention or replacement of any of these individuals. The loss of the services of any of our key personnel could have a material adverse effect our business, financial condition and results of operations.

We may be unable to attract and retain skilled and technically knowledgeable employees, which could adversely affect our business.

Our success and future growth is dependent upon attracting and retaining highly skilled professionals and other technical personnel. A number of our employees are highly skilled engineers, geologists and highly trained technicians, and our failure to continue to attract and retain such individuals could adversely affect our ability to compete in the oilfield services industry. We may confront significant and potentially adverse competition for these skilled and technically knowledgeable personnel, particularly during periods of increased demand for oil and natural gas. Additionally, at times there may be a shortage of skilled and technical personnel available in the market, potentially compounding the difficulty of attracting and retaining these employees. If we are unable to recruit or retain sufficient skilled and technical personnel it could have a material adverse effect on our business, financial condition and results of operations.

Unionization efforts could increase our costs or limit our flexibility.

Presently, none of our employees work under collective bargaining agreements. Unionization efforts have been made from time to time within our industry, to varying degrees of success. Any such unionization could increase our costs or limit our flexibility, which could have a material adverse effect on our business, financial condition and results of operations.

Restrictions on drilling activities intended to protect certain species of wildlife may adversely affect the ability of our customers to conduct drilling activities in some of the areas where we operate.

Oil and natural gas operations in our operating areas can be adversely affected by seasonal or permanent restrictions on drilling activities designed to protect various wildlife, which may limit the ability of our customers to operate in protected areas. Permanent restrictions imposed to protect endangered species could prohibit drilling in certain areas or require the implementation of expensive mitigation measures. Additionally, the designation of previously unprotected species as threatened or endangered in areas where we operate could result in increased costs arising from species protection measures. Restrictions on the oil and natural gas operations of our customers to protect wildlife could reduce demand for our products and services, which could have a material adverse effect on our business, financial condition and results of operations.

We are subject to the risk of supplier concentration.

Certain of our product lines depend on a limited number of third-party suppliers and vendors. As a result of this concentration in some of our supply chains, our business and operations could be negatively affected if our key suppliers were to experience significant disruptions affecting the price, quality, availability or timely delivery of their products. The partial or complete loss of any one of our key suppliers, or a significant adverse change in the relationship with any of these suppliers, through consolidation or otherwise, may limit our ability to manufacture and sell certain of our products.

We may not be able to satisfy technical requirements, testing requirements, code requirements or other specifications under contracts and contract tenders.

Many of our products could be used in harsh environments and severe service applications. Our contracts with customers and customer requests for bids may set forth detailed specifications or technical requirements (including that they meet certain industrial code requirements, such as API, ASME or similar codes, or that our processes and facilities maintain ISO or similar certifications) for our products and services, which may also include extensive testing requirements. We anticipate that such code testing requirements will become more common in our contracts. We cannot assure you that our products or facilities will be able to satisfy the specifications or requirements, or that we will be able to perform the full-scale testing necessary to prove that the product specifications are satisfied in future contract bids or under existing contracts, or that the costs of modifications to our products or facilities to satisfy the specifications and testing will not adversely affect our results of operations. If our products or facilities are unable to satisfy such requirements, or we are unable to perform or satisfy any scale testing, our customers may cancel their contracts and/or seek new suppliers, and could have a material adverse effect on our business, financial conditions and results of operations.

Risks Relating to Our Indebtedness

We are a holding company and rely on dividends, distributions and other payments, advances and transfers of funds from our subsidiaries to meet our obligations.

We are a holding company that does not conduct any business operations of our own. As a result, we are largely dependent upon cash dividends and distributions and other transfers from our subsidiaries to meet our obligations. The agreements governing the indebtedness of our subsidiaries impose restrictions on our subsidiaries' ability to pay dividends or other distributions to us. The deterioration of the earnings from, or other available assets of, our subsidiaries for any reason also could limit or impair their ability to pay dividends or other distributions to us.

Our outstanding indebtedness could adversely affect our financial condition and our ability to operate our business, and we may not be able to generate sufficient cash flows to meet our debt service obligations.

As of December 31, 2016, our total outstanding indebtedness was $90.8 million under our Senior Secured Credit Facilities. We intend to use a portion of the proceeds of this offering to repay our Term Loan (as defined below) under our Senior Secured Credit Facilities; however we anticipate we will have the ability to draw on our New Senior Secured Credit Facility and could incur substantial indebtedness in the future. Our outstanding indebtedness and any additional indebtedness we incur may have important consequences for us, including, without limitation, that:

- we may be required to use a substantial portion of our cash flow to pay the principal of and interest on our indebtedness;
- our indebtedness and leverage may increase our vulnerability to adverse changes in general economic and industry conditions, as well as to competitive pressures;
- our ability to obtain additional financing for working capital, capital expenditures, acquisitions and for general corporate and other purposes may be limited;
- expose us to the risk of increased interest rates because our borrowings are at variable rates of interest;
- prevent us from taking advantage of business opportunities as they arise or successfully carrying out our plans to expand our business; and
- our flexibility in planning for, or reacting to, changes in our business and our industry may be limited.

Under the terms of the credit agreements governing our Senior Secured Credit Facilities and New Senior Secured Credit Facility, we are required to comply with specified financial and operating covenants, which may

limit our ability to operate our business as we otherwise might operate it. The obligations under our Senior Secured Credit Facilities and New Senior Secured Credit Facility may be accelerated upon the occurrence of an event of default, which includes customary events of default including, without limitation, payment defaults, cross-defaults to certain material indebtedness, covenant defaults, material inaccuracy of representations and warranties, bankruptcy events, material judgments, certain ERISA-related events, material defects with respect to guarantees and collateral, invalidity of subordination provisions and change of control. If not cured, an event of default could result in any amounts outstanding, including any accrued interest and unpaid fees, becoming immediately due and payable, which would require us to, among other things: seek additional financing in the debt or equity markets, refinance or restructure all or a portion of our indebtedness, sell selected assets and/or reduce or delay planned capital or operating expenditures. Such measures might not be sufficient to enable us to service our debt and any such financing or refinancing might not be available on economically favorable terms or at all. If we are not able to generate sufficient cash flows to meet our debt service obligations or are forced to take additional measures to be able to service our indebtedness, it could have a material adverse effect on our business, financial condition and results of operations.

We and our subsidiaries may be able to incur substantial indebtedness.

We may incur substantial additional indebtedness in the future. Although the terms of the agreements governing our Senior Secured Credit Facilities and New Senior Second Credit Facility contain restrictions on our ability to incur additional indebtedness these restrictions are subject to a number of important exceptions, and indebtedness incurred in compliance with these restrictions could be substantial. If we and our subsidiaries incur significant additional indebtedness, the related risks to our financial condition could increase.

Restrictive covenants in the agreements governing our Senior Secured Credit Facilities and New Senior Second Credit Facility may restrict our ability to pursue our business strategies.

The agreements governing our Senior Secured Credit Facilities and New Senior Second Credit Facility contain a number of restrictive covenants that impose significant operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interests. These include covenants restricting, among other things, our ability to:

- incur additional indebtedness;
- grant liens;
- enter into burdensome agreements with negative pledge clauses or restrictions on subsidiary distributions;
- make certain investments;
- pay dividends;
- make payments in respect of junior lien or subordinated debt;
- make acquisitions;
- consolidate, amalgamate, merge, liquidate or dissolve;
- sell, transfer or otherwise dispose of assets;
- make certain organizational changes (including with respect to organizational documents and changes in fiscal year);
- engage in sale-leaseback transactions;
- engage in transactions with affiliates;
- enter into operating leases;
- enter into hedging arrangements;

- enter into certain leasehold arrangements and arrangements with respect to inventory and equipment;
- materially alter our business; and
- incur capital expenditures.

Our Senior Secured Credit Facilities contain financial covenants that requires (i) commencing with the fiscal quarter ended March 31, 2019, compliance with a leverage ratio test set at 3.00 to 1.00 as of the last day of each fiscal quarter, (ii) commencing with the fiscal quarter ended March 31, 2019, compliance with a fixed charge coverage ratio test set at 1.25 to 1.00 as of the last day of each fiscal quarter and (iii) commencing with the fiscal quarter ended December 31, 2015, compliance with an interest coverage ratio set at (x) 1.50 to 1.00 as of the last day of each fiscal quarter through and including the fiscal quarter ended December 31, 2017 and (y) 1.75 to 1.00 as of the last day of the fiscal quarter ended March 31, 2018 through and including the fiscal quarter ending December 31, 2018. We expect that our New Senior Secured Credit Facility will require compliance with certain leverage ratios, asset coverage ratios and interest coverage ratios. See “Description of Material Indebtedness.” Our ability to meet these financial ratios can be affected by events beyond our control and we cannot assure you that we will be able to meet these ratios. A breach of any covenant or restriction contained in the agreements governing our Senior Secured Credit Facilities and New Senior Secured Credit Facility could result in a default under this agreement. If any such default occurs, the lenders under such facilities, may elect (after the expiration of any applicable notice or grace periods) to declare all outstanding borrowings, together with accrued and unpaid interest and other amounts payable thereunder, to be immediately due and payable. The lenders under our Senior Secured Credit Facilities, also have the right upon an event of default thereunder to terminate any commitments they have to provide further borrowings. Further, following an event of default under the agreement governing our Senior Secured Credit Facilities and New Senior Secured Credit Facility, the lenders under such facilities will have the right to proceed against the collateral granted to them to secure that debt. If the debt under our Senior Secured Credit Facilities or New Senior Secured Credit Facility was to be accelerated, our assets may not be sufficient to repay in full that debt or any other debt that may become due as a result of that acceleration.

Volatility and weakness in bank and capital markets may adversely affect credit availability and related financing costs for us.

Bank and capital markets can experience periods of volatility and disruption. If the disruption in these markets is prolonged, our ability to refinance, and the related cost of refinancing, some or all of our debt could be adversely affected. Additionally, during periods of volatile credit markets, there is a risk that lenders, even those with strong balance sheets and sound lending practices, could fail or refuse to honor their legal commitments and obligations under existing credit commitments, including our Revolving Credit Facility and New Senior Secured Credit Facility. Although we currently can access the bank and capital markets, there is no assurance that such markets will continue to be a reliable source of financing for us. These factors, including the tightening of credit markets, could adversely affect our ability to obtain cost-effective financing. Increased volatility and disruptions in the financial markets also could make it more difficult and more expensive for us to refinance outstanding indebtedness and obtain financing. In addition, the adoption of new statutes and regulations, the implementation of recently enacted laws or new interpretations or the enforcement of older laws and regulations applicable to the financial markets or the financial services industry could result in a reduction in the amount of available credit or an increase in the cost of credit. Disruptions in the financial markets can also adversely affect our lenders, insurers, customers and other counterparties. Any of these results could results in a material adverse effect to our business, financial condition and results of operations.

Risks Relating to This Offering and Ownership of Our Common Stock

There is no existing market for our common stock and an active, liquid trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. We cannot predict the extent to which investor interest in our company will lead to the development of an active trading market or how liquid

that market may become. If an active trading market does not develop, you may have difficulty selling any of our shares that you purchase. The initial public offering price of our common stock will be determined by negotiation between us and the underwriters and may not be indicative of prices that will prevail after the completion of this offering. The market price of our common stock may decline below the initial public offering price, and you may not be able to resell your shares at, or above, the initial public offering price.

The price of our common stock may be volatile and you could lose all or part of your investment.

Securities markets worldwide have experienced in the past, and are likely to experience in the future, significant price and volume fluctuations. Specifically, the oilfield services sector has recently experienced significant market volatility. This market volatility, as well as general economic, market or political conditions could reduce the market price of our common stock regardless of our results of operations. The trading price of our common stock is likely to be highly volatile and could be subject to wide price fluctuations in response to various factors, including, among other things, the risk factors described herein and other factors beyond our control. Factors affecting the trading price of our common stock could include:

- market conditions in the broader stock market;
- actual or anticipated variations in our quarterly financial and operating results;
- developments in the oil and natural gas industry in general or in the oil and natural gas services market in particular;
- variations in operating results of similar companies;
- introduction of new services by us, our competitors or our customers;
- issuance of new, negative or changed securities analysts' reports or recommendations or estimates;
- investor perceptions of us and the industries in which we or our customers operate;
- sales, or anticipated sales, of our stock, including sales by our officers, directors and significant stockholders;
- additions or departures of key personnel;
- regulatory or political developments;
- the public's response to press releases or other public announcements by us or third parties, including our filings with the SEC;
- announcements media reports or other public forum comments related to litigation, claims or reputational charges against us;
- guidance, if any, that we provide to the public, any changes in this guidance or our failure to meet this guidance;
- the development and sustainability of an active trading market for our common stock;
- investor perceptions of the investment opportunity associated with our common stock relative to other investment alternatives;
- other events or factors, including those resulting from system failures and disruptions, earthquakes, hurricanes, war, acts of terrorism, other natural disasters or responses to these events;
- changes in accounting principles;
- share-based compensation expense under applicable accounting standards;
- litigation and governmental investigations; and
- changing economic conditions.

These and other factors may cause the market price and demand for shares of our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock sometimes have instituted securities class action litigation against the company that issued the stock. Securities litigation against us, regardless of the merits or outcome, could result in substantial costs and divert the time and attention of our management from our business, which could significantly harm our business, profitability and reputation.

We are controlled by the Advent Funds, whose interests may differ from those of our public stockholders.

We are controlled by the Advent Funds and after this offering will continue to be controlled by the Advent Funds. After the completion of this offering, the Advent Funds will beneficially own in the aggregate 68.3% of the combined voting power of our common stock (or 65.3% if the underwriters exercise their option to purchase additional shares in full). As a result of this ownership, Advent will have effective control over the outcome of votes on all matters requiring approval by our stockholders, including the election of directors, the adoption of amendments to our charter and bylaws and other significant corporate transactions.

In addition, persons associated with Advent currently serve on our board of directors (our "Board"). Following this offering, the interests of Advent may not always coincide with the interests of our other stockholders, and the concentration of effective control in Advent will limit other stockholders' ability to influence corporate matters. The concentration of ownership and voting power of Advent also may delay, defer or even prevent an acquisition by a third-party or other change of control and may make some transactions more difficult or impossible without their support, even if such events are in the best interests of our other stockholders.

Further, Advent may have an interest in having us pursue acquisitions, divestitures, financing or other transactions, including, but not limited to, the issuance of additional debt or equity and the declaration and payment of dividends, that, in its judgment, could enhance Advent's equity investments, even though such transactions may involve risk to us or to our creditors. Additionally, the Advent Funds may make investments in businesses that directly or indirectly compete with us, or may pursue acquisition opportunities that may be complementary to our business and, as a result, those acquisition opportunities may not be available to us.

Advent may take actions that our other stockholders do not view as beneficial, which may adversely affect our business, financial condition and results of operations and cause the value of your investment to decline.

Our directors or stockholders, including the Advent Funds, with certain exceptions, do not have obligations to present business opportunities to us and may compete with us.

Our amended and restated certificate of incorporation provides that our directors and stockholders, including the Advent Funds, do not have any obligation to offer us an opportunity to participate in business opportunities presented to them even if the opportunity is one that we might reasonably have pursued (and therefore may be free to compete with us in the same business or similar businesses), and that, to the extent permitted by law, such directors and stockholders, including the Advent Funds, will not be liable to us or our stockholders for breach of any duty by reason of any such activities.

As a result, our stockholders, including the Advent Funds, and directors and their respective affiliates will not be prohibited from investing in competing businesses or doing business with our clients. Therefore, we may be in competition with our stockholders, including the Advent Funds, and directors or their respective affiliates, and we may not have knowledge of, or be able to pursue, transactions that could potentially be beneficial to us. Accordingly, we may lose certain corporate opportunities or suffer competitive harm, which could have a material adverse effect on our business, financial condition, results of operation or prospects.

Future sales of our common stock, or the perception in the public markets that these sales may occur, could cause the market price for our common stock to decline.

Upon consummation of this offering, there will be 45,325,225 shares of our common stock outstanding. All shares of common stock sold in this offering will be freely transferable without restriction or further registration under the Securities Act. At the time of this offering, we will also have registered 7,645,071 shares of common stock reserved for issuance under our equity incentive plans of which options to purchase 3,112,548 shares of common stock are outstanding, which shares may be issued upon issuance and once vested, subject to any applicable lock-up restrictions then in effect. We cannot predict the effect, if any, that market sales of shares of our common stock or the availability of shares of our common stock for sale will have on the market price of our common stock prevailing from time to time. Sales of substantial amounts of shares of our common stock in the public market, or the perception that those sales will occur, could cause the market price of our common stock to decline. Of the remaining shares of common stock outstanding, 35,825,225 will be restricted securities within the meaning of Rule 144 under the Securities Act and subject to certain restrictions on resale following the consummation of this offering. Restricted securities may be sold in the public market only if they are registered under the Securities Act or are sold pursuant to an exemption from registration such as Rule 144 or Rule 701, as described in "Shares Eligible for Future Sale." Upon consummation of this offering, certain holders of our common stock will have registration rights with respect to 35,169,218 of these restricted securities. See "Certain Relationships and Related Party Transactions—Registration Rights Agreement."

We, each of our executive officers and directors, the Advent Funds and certain other existing stockholders have agreed that (subject to certain exceptions), for a period of 180 days from the date of this prospectus, we and they will not, without the prior written consent of the representatives of the underwriters, dispose of or hedge any shares or any securities convertible into or exchangeable for our common stock. The representatives of the underwriters, in their sole discretion may release any of the securities subject to these lock-up agreements at any time, which, in the case of executive officers and directors, shall be with notice. See "Underwriting (Conflicts of Interest)." Following the expiration of the applicable lock-up period, all of the issued and outstanding shares of our common stock will be eligible for future sale, subject to the applicable volume, manner of sale, holding period and other limitations of Rule 144. See "Shares Eligible for Future Sale" for a discussion of the shares of common stock that may be sold into the public market in the future.

If you purchase shares of common stock sold in this offering, you will incur immediate and substantial dilution.

The initial public offering price per share is substantially higher than the pro forma net tangible book value per share immediately after this offering. As a result, you will pay a price per share that substantially exceeds the book value of our assets after subtracting the book value of our liabilities. Based on our net tangible book value as of December 31, 2016 and assuming an offering price of $16.50 per share, the midpoint of the range set forth on the cover page of this prospectus, you will incur immediate and substantial dilution in the amount of $14.74 per share. See "Dilution."

We have elected to take advantage of the "controlled company" exemption to the corporate governance rules for publicly-listed companies, which could make our common stock less attractive to some investors or otherwise harm our stock price.

Because we qualify as a "controlled company" under the corporate governance rules for publicly-listed companies on NASDAQ, we are not required to have a majority of our Board be independent, nor are we required to have a compensation committee or a Board committee performing the Board nominating function. In light of our status as a controlled company, we may choose to change our Board composition, or the composition of the compensation, nominating and corporate governance committee. Accordingly, should the interests of the Advent Funds differ from those of other stockholders, the other stockholders may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance rules for publicly-listed

companies. Our status as a controlled company could make our common stock less attractive to some investors or otherwise harm our stock price.

Anti-takeover protections in our amended and restated certificate of incorporation, our amended and restated bylaws or our contractual obligations may discourage or prevent a takeover of our company, even if an acquisition would be beneficial to our stockholders.

Provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws, as amended, as well as provisions of the Delaware General Corporation Law (the "DGCL"), could delay or make it more difficult to remove incumbent directors or could impede a merger, takeover or other business combination involving us or the replacement of our management or discourage a potential investor from making a tender offer for our common stock, which, under certain circumstances, could reduce the market value of our common stock, even if it would benefit our stockholders.

In addition, our Board has the authority to cause us to issue, without any further vote or action by the stockholders, up to 10,000,000 shares of preferred stock, par value $0.01 per share, in one or more series, to designate the number of shares constituting any series, and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, voting rights, rights and terms of redemption, redemption price or prices and liquidation preferences of such series. The issuance of shares of preferred stock or the adoption of a stockholder rights plan may have the effect of delaying, deferring or preventing a change in control of our company without further action by the stockholders, even where stockholders are offered a premium for their shares. See "Description of Capital Stock—Anti-takeover Provisions."

In addition, under the agreements governing our Senior Secured Credit Facilities and New Senior Secured Credit Facility, a change of control would cause us to be in default and the lenders under such facilities would have the right to accelerate their loans, and if so accelerated, we would be required to repay all of our outstanding obligations under such facilities. In addition, from time to time we may enter into contracts that contain change of control provisions that limit the value of, or even terminate, the contract upon a change of control. These change of control provisions may discourage a takeover of our company, even if an acquisition would be beneficial to our stockholders.

The requirements of being a public company, including compliance with the reporting requirements of the Exchange Act, and the requirements of the Sarbanes-Oxley Act, may strain our resources, increase our costs and distract management, and we may be unable to comply with these requirements in a timely or cost-effective manner.

As a publicly traded company, and particularly after we cease to be an emerging growth company (to the extent that we take advantage of certain exceptions from reporting requirements that are available under the JOBS Act as an emerging growth company), we will incur additional legal, accounting and other expenses that we were not required to incur in the past. After this offering, we will be required to file with the SEC annual and quarterly information and other reports that are specified in Section 13 of the Exchange Act. We also will become subject to other reporting and corporate governance requirements, including the requirements of NASDAQ and certain provisions of the Sarbanes-Oxley Act and the regulations promulgated thereunder, which will impose additional compliance obligations upon us. As a public company, we will, among other things:

- prepare and distribute periodic public reports and other stockholder communications in compliance with our obligations under the federal securities laws and applicable NASDAQ rules;
- create or expand the roles and duties of our Board and committees of the Board;
- institute more comprehensive financial reporting and disclosure compliance functions;
- enhance our investor relations function; and
- involve and retain to a greater degree outside counsel and accountants in the activities listed above.

These changes will require a commitment of additional resources and many of our competitors already comply with these obligations. We may not be successful in implementing these requirements and the commitment of resources required for implementing them could adversely affect our business, financial condition and results of operations.

The changes necessitated by becoming a public company require a significant commitment of resources and management oversight that has increased and may continue to increase our costs and might place a strain on our systems and resources. As a result, our management's attention might be diverted from other business concerns. If we are unable to offset these costs through other savings then it could have a material adverse effect on our business, financial condition and results of operations.

In addition, we expect that being a public company subject to these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our Board or as executive officers. We are currently evaluating these rules, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

We are an "emerging growth company" and may elect to comply with reduced reporting requirements applicable to emerging growth companies, which could make our common stock less attractive to investors.

We are an emerging growth company and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of Sarbanes-Oxley, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. In addition, even if we comply with the greater obligations of public companies that are not emerging growth companies immediately after the initial public offering, we may avail ourselves of the reduced requirements applicable to emerging growth companies from time to time in the future. We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

We will remain an emerging growth company until the end of the fiscal year following the fifth anniversary of this offering, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenues exceed $1 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds $700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than $1 billion in non-convertible debt during the preceding three-year period, whether or not issued in a registered offering.

We have identified material weaknesses in our internal control over financial reporting and may identify additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls, which may result in material misstatements of our financial statements or cause to us to fail to meet our reporting obligations or fail to prevent fraud; which would harm our business and could negatively impact the price of our common stock.

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. If we fail to maintain an effective system of internal controls, we might not be able to report on our financial results accurately or prevent fraud; which would harm our business and could negatively impact the price of our common stock. Prior to this offering, we were a private company and had limited accounting and financial

reporting personnel and other resources with which to address our internal controls and procedures. In connection with the audit of our financial statements for the years ended December 31, 2015 and December 31, 2016, we and our independent registered public accounting firm identified material weaknesses in our internal control over financial reporting. A material weakness is defined as a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our financial statements will not be prevented or detected on a timely basis.

We determined that we did not design or maintain an effective control environment with a sufficient number of trained professionals with the appropriate level of accounting knowledge and experience to properly analyze, record and disclose accounting matters commensurate with our financial reporting requirements. This material weakness contributed to the following material weaknesses in our internal control over financial reporting:

- We did not design and maintain sufficient formal accounting policies and controls over income taxes. Specifically, we did not have controls designed to address the accuracy of income tax expense (benefit) and related consolidated balance sheet accounts, including deferred income taxes, as well as adequate procedures and controls to review the work of external experts engaged to assist in income tax matters related to our tax structure or to monitor the presentation and disclosure of income taxes.
- We did not design and maintain sufficient formal accounting policies and controls over the presentation of the statement of cash flows. Specifically, we did not have controls designed to properly classify cash flows related to our foreign exchange gains (losses) associated with our foreign denominated debt and deferred financing costs related to our extinguishment of debt.
- We did not design and maintain adequate controls to address segregation of duties related to journal entries and account reconciliations as certain accounting personnel have the ability to prepare and post journal entries, as well as reconcile accounts, without an independent review by someone other than the preparer. Specifically, our internal controls were not designed or operating effectively to evidence that journal entries were appropriately recorded or were properly reviewed for validity, accuracy and completeness.

These material weaknesses resulted in the need to correct material misstatements in our consolidated financial statements for the years ended December 31, 2014 and 2015 prior to their issuance. Each of the material weaknesses described above or any newly identified material weakness could result in a misstatement of our accounts or disclosures that would result in a material misstatement of our annual or interim consolidated financial statements that would not be prevented or detected.

We have begun to remediate and plan to further remediate these material weaknesses primarily by implementing additional review procedures within the accounting and finance department, hiring additional staff and, if appropriate, engaging external accounting experts with the appropriate knowledge to supplement our internal resources in our computation and review processes. These actions and planned actions are subject to ongoing management review and the oversight of our Board. We cannot assure you that the measures we have taken to date, or any measures we may take in the future, will be sufficient to remediate the control deficiencies that led to our material weaknesses in our internal control over financial reporting or to avoid potential future material weaknesses. In addition, neither our management nor an independent registered public accounting firm has ever performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act because no such evaluation has been required. Had we or our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, additional material weaknesses may have been identified. If we are unable to successfully remediate our existing or any future material weakness in our internal control over financial reporting, or identify any additional material weaknesses that may exist, the accuracy and timing of our financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to applicable stock exchange listing requirements, we may be unable to prevent fraud, investors may lose confidence in our financial reporting,

and our stock price may decline as a result. Additionally, our reporting obligations as a public company will place a significant strain on our management, operational and financial resources and systems for the foreseeable future and may cause us to fail to timely achieve and maintain the adequacy of our internal control over financial reporting.

Because we do not intend to pay cash dividends in the foreseeable future, you may not receive any return on investment unless you are able to sell your common stock for a price greater than your purchase price.

We do not intend in the foreseeable future to pay any dividends to holders of our common stock. We currently intend to retain our future earnings, if any, for the foreseeable future, to repay indebtedness and to support our general corporate purposes. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future and the success of an investment in shares of our common stock will depend upon any future appreciation in their value. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which investors have purchased their shares. However, the payment of future dividends will be at the discretion of our Board, subject to applicable law, and will depend on, among other things, our earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions that apply to the payment of dividends and other considerations that our Board deems relevant. The agreements governing our Senior Secured Credit Facilities and New Senior Second Credit Facilities limit the amounts available to us to pay cash dividends, and, to the extent that we require additional funding, financing sources may prohibit the payment of a dividend. See “Dividend Policy.” As a consequence of these limitations and restrictions, we may not be able to make the payment of dividends on our common stock.

If securities or industry analysts publish unfavorable research, about our business, the price of our common stock and our trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently publish research on our company. Once securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrade our common stock or publish unfavorable research about our business, the price of our common stock likely would decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause the price of our common stock and trading volume to decline.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation and bylaws that will be in effect prior to the completion of this offering provide that we will indemnify our directors and officers, in each case, to the fullest extent permitted by Delaware law. Pursuant to our charter, our directors will not be liable to the company or any stockholders for monetary damages for any breach of fiduciary duty, except (i) acts that breach his or her duty of loyalty to the company or its stockholders, (ii) acts or omissions without good faith or involving intentional misconduct or knowing violation of the law, (iii) pursuant to Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit. The bylaws also require us, if so requested, to advance expenses that such director or officer incurred in defending or investigating a threatened or pending action, suit or proceeding, provided that such person will return any such advance if it is ultimately determined that such person is not entitled to indemnification by us. Any claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation will provide, subject to certain exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our amended and restated certificate of incorporation will provide, subject to limited exceptions, that the Court of Chancery of the State of Delaware will, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders; (iii) any action asserting a claim against us, any director or our officers or employees arising pursuant to any provision of the DGCL, our certificate or our amended and restated by-laws; or (iv) any action asserting a claim against us, any director or our officers or employees that is governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our certificate described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision that will be contained in our certificate to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could have a material adverse effect on our business, financial condition and results of operations.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. Forward-looking statements can be identified by words such as “anticipates,” “intends,” “plans,” “seeks,” “believes,” “estimates,” “expects” and similar references to future periods, or by the inclusion of forecasts or projections. Examples of forward-looking statements include, but are not limited to, statements we make regarding the outlook for our future business and financial performance, such as those contained in “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, by their nature, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. As a result, our actual results may differ materially from those contemplated by the forward-looking statements. Important factors that could cause our actual results to differ materially from those in the forward-looking statements include regional, national or global political, economic, business, competitive, market and regulatory conditions and the following:

- declines in the level of oil and natural gas exploration and production activity within Canada and the United States;
- oil and natural gas price fluctuations;
- loss of significant customers;
- inability to successfully implement our strategy of increasing sales of products and services into the United States;
- significant competition for our products and services;
- our inability to successfully develop and implement new technologies, products and services;
- our inability to protect and maintain critical intellectual property assets;
- currency exchange rate fluctuations;
- impact of severe weather conditions;
- restrictions on the availability of our customers to obtain water essential to the drilling and hydraulic fracturing processes;
- our failure to identify and consummate potential acquisitions;
- our inability to accurately predict customer demand;
- losses and liabilities from uninsured or underinsured drilling and operating activities;
- changes in legislation or regulation governing the oil and natural gas industry, including restrictions on emissions of GHGs;
- failure to comply with federal, state and local and non-U.S. laws and other regulations;
- loss of our information and computer systems;
- system interruptions or failures, including cyber-security breaches, identity theft or other disruptions that could compromise our information;
- our failure to establish and maintain effective internal control over financial reporting;
- our success in attracting and retaining qualified employees and key personnel; and
- our inability to satisfy technical requirements and other specifications under contracts and contract tenders.

See “Risk Factors” for a further description of these and other factors that could cause actual results to differ materially from those in the forward-looking statements. For the reasons described above, we caution you against relying on any forward-looking statements, which should also be read in conjunction with the other cautionary statements that are included elsewhere in this prospectus. Any forward-looking statement made by us in this prospectus speaks only as of the date on which we make it. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

USE OF PROCEEDS

We estimate that the net proceeds to us from our sale of 9,500,000 shares of common stock in this offering will be approximately $144.8 million, after deducting underwriting discounts and commissions and estimated expenses payable by us in connection with this offering. This assumes a public offering price of $16.50 per share, which is the midpoint of the price range set forth on the cover of this prospectus. The underwriters also have an option to purchase up to an additional 1,425,000 shares of common stock from the selling stockholders. We will not receive any proceeds from the sale of shares of common stock by the selling stockholders.

We intend to use the net proceeds from this offering to repay indebtedness under our Senior Secured Credit Facilities and use the remainder for general corporate purposes. As of December 31, 2016, we had $90.8 million outstanding under the Term Loan of our Senior Secured Credit Facilities. Our Senior Secured Credit Facilities bear interest at a rate per annum equal to an applicable margin plus a base rate determined by reference to the highest of either: (a) in the case of loans denominated in U.S. dollars, (i) the federal funds rate plus 0.5%, (ii) one-month LIBOR plus 1.00% and (iii) the prime commercial lending rate of the administrative agent as in effect on the relevant day or (b) in the case of loans denominated in Canadian dollars, (i) the prime commercial lending rate of the administrative agent as in effect on the relevant day for determining interest rates on Canadian dollar denominated commercial loans made in Canada and (ii) CDOR plus 1.0%. Our Senior Secured Credit Facilities mature on August 7, 2019. See “Description of Material Indebtedness.”

Assuming, a $1.00 increase (decrease) in the assumed initial public offering price of $16.50 per share (the midpoint of the price range set forth on the cover of this prospectus) would increase (decrease) the net proceeds to us from this offering by $8.9 million, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated expenses payable by us.

A repayment of the outstanding borrowings under our Senior Secured Credit Facilities could result in at least 5% of the net proceeds of this offering being paid to an affiliate of an underwriter who is a lender under our Senior Secured Credit Facilities. Accordingly, this offering is being made in compliance with the requirements of Rule 5121 of the FINRA rules. For more information, see “Underwriting (Conflicts of Interest).”

The foregoing represents our current intentions with respect to the use and allocation of the net proceeds of this offering based upon our present plans and business conditions, but our management will have significant flexibility and discretion in applying the net proceeds. The occurrence of unforeseen events or changed business conditions could results in application of the net proceeds of this offering in a manner other than as described in the prospectus.

DIVIDEND POLICY

We do not intend to pay cash dividends on our common stock in the foreseeable future. However, in the future, subject to the factors described below and our future liquidity and capitalization, we may change this policy and choose to pay dividends.

We are a holding company that does not conduct any business operations of our own. As a result, our ability to pay cash dividends on our common stock is dependent upon cash dividends and distributions and other transfers from our subsidiaries. The ability of our subsidiaries to pay dividends is currently restricted by the terms of our Senior Secured Credit Facilities and may be further restricted by the New Senior Secured Credit Facility or any future indebtedness we or they incur.

In addition, under Delaware law, our Board may declare dividends only to the extent of our surplus (which is defined as total assets at fair market value minus total liabilities, minus statutory capital) or, if there is no surplus, out of our net profits for the then current and/or immediately preceding fiscal year.

Any future determination to pay dividends will be at the discretion of our Board and will take into account:

- restrictions in our debt instruments, including our secured credit facilities;
- general economic business conditions;
- our net income, financial condition and results of operations;
- our capital requirements;
- our prospects;
- the ability of our operating subsidiaries to pay dividends and make distributions to us;
- legal restrictions; and
- such other factors as our Board may deem relevant.

See “Risk Factors—Risks Relating to This Offering and Ownership of Our Common Stock—Because we do not intend to pay cash dividends in the foreseeable future, you may not receive any return on investment unless you are able to sell your common stock for a price greater than your purchase price.” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources.”

CAPITALIZATION

The following table sets forth our unaudited cash and cash equivalents and our capitalization as of December 31, 2016:

- on an actual basis giving effect to the 3.00 for 1.00 stock split that occurred on April 13, 2017; and
- on an as adjusted basis to give effect to (i) our amended and restated certificate of incorporation and amended and restated bylaws as they will be in effect upon the consummation of this offering and (ii) the sale of 9,500,000 shares of our common stock in this offering at an assumed public offering price of $16.50 per share, which is the midpoint of the estimated offering price range set forth on the cover of this prospectus, and the application of the net proceeds received by us from this offering as described under "Use of Proceeds."

This table should be read in conjunction with "Use of Proceeds," "Selected Historical Consolidated Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Description of Capital Stock" and the consolidated financial statements and notes thereto appearing elsewhere in this prospectus.

	As of December 31, 2016	
	Actual	As Adjusted(1)
	(in thousands, except share and per share amounts)	
Cash and cash equivalents	$ 18,275	$ 72,250
Debt:		
Senior Secured Credit Facilities, net(2)	$ 89,166	$ —
Total debt, net	$ 89,166	$ —
Stockholders' equity:		
Common stock, $0.01 par value per share, 54,000,000 shares authorized, actual, 225,000,000 shares authorized, as adjusted, 34,024,326 shares issued and 34,005,978 shares outstanding, actual, and 43,524,326 shares issued and 43,505,978 shares outstanding, as adjusted(3)	340	435
Preferred stock, $0.01 par value per share, 1 share authorized, actual, 10,000,000 shares authorized, as adjusted, 1 share issued and outstanding, actual, 1 share issued and outstanding, as adjusted	—	—
Additional paid-in capital	237,566	383,145
Accumulated other comprehensive loss	(82,015)	(82,015)
Retained earnings	21,762	19,229
Treasury stock, at cost (18,348 shares actual and 18,348 shares as adjusted)	(175)	(175)
Total stockholders' equity	177,478	320,619
Total capitalization	$266,644	$ 320,619

(1) Each $1.00 increase or decrease in the public offering price per share would increase or decrease, as applicable, our net proceeds, after deducting the underwriting discount and estimated offering expenses payable by us, by $8.9 million (assuming no exercise of the underwriters' option to purchase additional shares). Similarly, an increase or decrease of one million shares of common stock sold in this offering by us would increase or decrease, as applicable, our net proceeds, after deducting the underwriting discount and estimated offering expenses payable by us, by $15.5 million, based on an assumed initial public offering price of $16.50 per share, which is the midpoint of the price range set forth on the cover of this prospectus.

(2) For a description of our Senior Secured Credit Facilities, see "Description of Material Indebtedness—Senior Secured Credit Facilities." As of December 31, 2016, we had $90.8 million outstanding principal amount

under our Term Loan (less $1.7 million of debt issuance costs), no debt outstanding under our Revolving Credit Facility and availability of $20.0 million under our Revolving Credit Facility.

(3) The number of shares of common stock issued and outstanding does not give effect to the exchange of 1,819,247 shares of common stock of NCS Multistage, Inc. (Canada) that were offered as consideration in connection with Advent's acquisition of HoldCo in 2012 for 1,819,247 shares of our common stock. See "Certain Relationships and Related Party Transactions—Cemblend Transactions."

DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the net tangible book value per share of our common stock upon the consummation of this offering. Dilution results from the fact that the per share offering price of our common stock is in excess of the book value per share attributable to new investors.

Our net tangible book value as of December 31, 2016, was $(63.3) million, or $(1.77) per share of common stock. Net tangible book value represents the amount of total tangible assets less total liabilities, and net tangible book value per share represents net tangible book value divided by the number of shares of common stock outstanding, in each case, after giving effect to the 3.00 for 1.00 stock split of common stock that occurred on April 13, 2017.

After giving effect to (i) the sale of 9,500,000 shares of common stock in this offering at the assumed initial public offering price of $16.50 per share (the midpoint of the price range set forth on the cover of this prospectus) and (ii) the application of the net proceeds from this offering, our as adjusted net tangible book value as of December 31, 2016, would have been $79.8 million, or $1.76 per share. This represents an immediate increase in as adjusted net tangible book value of $3.53 per share to our existing investors and an immediate dilution in as adjusted net tangible book value of $14.74 per share to new investors.

The following table illustrates this dilution on a per share of common stock basis:

Assumed initial public offering price per share		$16.50
Net tangible book value per share as of December 31, 2016		(1.77)
Increase in net tangible book value per share attributable to new investors	$3.53	
As adjusted net tangible book value per share after this offering		1.76
Dilution in net tangible book value per share to new investors in this offering		$14.74

The following table summarizes, on an as adjusted basis as of December 31, 2016, after giving effect to this offering, the total number of shares of common stock owned by existing stockholders and to be owned by new investors, the total cash consideration paid, or to be paid, and the average price per share paid, or to be paid, by new investors purchasing shares in this offering, at an assumed initial public offering price of $16.50 per share, which is the midpoint of the range set forth on the cover of this prospectus, before deducting the estimated underwriting discounts and commissions:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	35,825,225	79.0%	$372,746,298	70.4%	$ 10.40
New investors	9,500,000	21.0	156,750,000	29.6	16.50
Total	45,325,225	100.0%	$529,496,298	100.0%	$ 11.68

A $1.00 increase (decrease) in the assumed initial public offering price of $16.50 per share would increase (decrease) our as adjusted net tangible book value by $8.9 million, the as adjusted net tangible book value per share after this offering by $0.20 and the dilution per share to new investors by $(0.80) assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

After our initial public offering, the number of shares of common stock held by existing stockholders will be 35,825,225, or approximately 79% of the total shares of common stock outstanding after our initial public

offering, and the number of shares held by new investors will be 9,500,000, or approximately 21% of the total shares of common stock outstanding after our initial public offering.

If the underwriters were to fully exercise their option to purchase 1,425,000 additional shares of our common stock, the percentage of shares of our common stock held by existing investors would be 76%, and the percentage of shares of our common stock held by new investors would be 24%.

The above discussion and tables are based on the number of shares outstanding at December 31, 2016. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities could result in further dilution to our stockholders.

SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA

The following tables set forth our selected historical consolidated financial data for the periods and as of the dates indicated. We derived the consolidated statements of operations data and the consolidated statements of cash flows data for the years ended December 31, 2016 and 2015 and the consolidated balance sheet data as of December 31, 2016 and 2015 from our audited consolidated financial statements and related notes thereto included elsewhere in this prospectus.

Our historical results are not necessarily indicative of future operating results. You should read the information set forth below together with "Prospectus Summary—Summary Historical Consolidated Financial and Other Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Capitalization" and our consolidated financial statements and the related notes thereto included elsewhere in this prospectus.

	Year Ended December 31,	
	2016	2015
	(in thousands, except share and per share amounts)	
Consolidated Statement of Operations Data:		
Revenues:		
Product sales	$ 73,220	$ 80,079
Services	25,259	33,926
Total revenues	98,479	114,005
Cost of sales:		
Cost of product sales, exclusive of depreciation and amortization expense below	40,511	40,160
Cost of services, exclusive of depreciation and amortization expense shown below	13,322	14,553
Total cost of sales, exclusive of depreciation and amortization expense shown below	53,833	54,713
Selling, general and administrative expenses	37,061	37,804
Depreciation	1,766	2,695
Amortization	23,801	24,576
(Loss) from operations	(17,982)	(5,783)
Other income (expenses)		
Interest (expense), net	(6,286)	(8,064)
Other income (expense), net	45	(131)
Foreign currency exchange (loss) gain	(2,522)	25,779
Total other (expense) income	(8,763)	17,584
(Loss) income before income tax expense	(26,745)	11,801
Income tax (benefit)	(8,818)	(16,224)
Net (loss) income	$ (17,927)	$ 28,025
Net (loss) income per share:		
Basic	$ (0.53)	$ 0.88
Diluted	$ (0.53)	$ 0.86
Weighted average shares outstanding:		
Basic	34,007,505	29,965,946
Diluted(1)	34,007,505	32,432,919
Consolidated Statement of Cash Flows Data:		
Net cash provided by (used in):		
Operating activities	$ 10,684	$ 4,369

	Year Ended December 31,	
	2016	2015
	(in thousands, except share and per share amounts)	
Investing activities	(1,840)	(1,221)
Financing activities	(315)	(12,766)

(1) The diluted weighted average shares outstanding amount excludes the impact of options that would be anti-dilutive.

	As of December 31,	
	2016	2015
	(in thousands)	
Consolidated Balance Sheet Data:		
Cash and cash equivalents	$ 18,275	$ 9,545
Total assets	326,827	332,537
Total debt, net	89,166	85,856
Total liabilities	149,349	145,068
Total stockholders' equity	177,478	187,469

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

The following is a discussion and analysis of our financial condition and results of operations as of, and for, the periods presented. You should read the following discussion and analysis of our financial condition and results of operations together with the sections entitled "Prospectus Summary—Summary Historical Consolidated Financial and Other Data," "Risk Factors," "Cautionary Note Regarding Forward-Looking Statements," "Selected Historical Consolidated Financial Data" and our consolidated financial statements and related notes thereto included elsewhere in this prospectus. This discussion and analysis contains forward-looking statements regarding the industry outlook, our expectations, estimates and assumptions concerning events and financial and industry trends that may affect our future results of operations or financial condition. These forward-looking statements are subject to numerous risks and uncertainties, including but not limited to the risks and uncertainties described in "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements." Our actual results may differ materially from those contained in or implied by these forward-looking statements.

Overview

We are a leading provider of highly engineered products and support services that facilitate the optimization of oil and natural gas well completions and field development strategies. We provide our products and services primarily to E&P companies for use in onshore wells, predominantly wells that have been drilled with horizontal laterals in unconventional oil and natural gas formations. Our products and services are utilized in oil and natural gas basins throughout North America and in selected international markets, including Argentina, China and Russia. We have provided our products and services to over 140 customers in 2016, including leading large independent oil and natural gas companies and major oil companies.

Our primary offering is our Multistage Unlimited family of completion products and services, which enable efficient pinpoint stimulation: the process of individually stimulating each entry point into a formation targeted by an oil or natural gas well. Our Multistage Unlimited products and services are typically utilized in cemented wellbores and enable our customers to precisely place stimulation treatments in a more controlled and repeatable manner as compared with traditional completion techniques. Our Multistage Unlimited products and services operate in conjunction with third-party providers of pressure pumping, coiled tubing and other services.

We began providing pinpoint stimulation products and services in 2006, and since then our technology has been used in the completion of more than 7,600 wells comprising over 155,000 individual frac stages. Our initial focus on the Canadian market has resulted in our products and services being used in 26% of all horizontal wells drilled in Canada in 2016. We began our efforts to increase our penetration of the U.S. market in 2013, and the United States accounted for approximately 23% of our revenue in 2016. We are focused on increasing our market share in the United States, particularly in the Permian Basin. Sales of our products and services in the Permian Basin contributed 56% and 43% of our revenue in the United States in 2016 and 2015, respectively.

Our History

Since our inception in 2006, we have focused on developing highly engineered products and support services that facilitate the optimization of oil and natural gas well completions and field development strategies. Outlined below are selected milestones in our development:

- In 2006, we developed our first downhole frac isolation assembly that is designed to run on coiled tubing. This downhole frac isolation assembly was primarily used in multistage stimulation of vertical coalbed methane wells in the Raton Basin in Colorado and New Mexico. We have improved our downhole frac isolation assembly over time.
- In 2007 and 2008, we developed, field trialed and introduced the Mongoose Frac Assembly ("Mongoose"), a coiled tubing deployed downhole frac isolation assembly that incorporates a sand jet

perforating sub and is capable of isolating, cutting tunnels into a formation and stimulating multiple frac stages in a single operation without removing the tool from the wellbore. We launched this product in Canada, where we had identified customers for trial wells, in 2008 for use in vertical and horizontal wells. In connection with the launch of Mongoose, we established our Canadian operations.

- In 2010, we developed the GripShift sliding sleeve. The GripShift sliding sleeve is a frac sleeve that works in conjunction with our further modified downhole frac isolation assembly, a derivation of the Mongoose, which was enhanced to further streamline multistage completions by eliminating the need for sand jet perforating. We also began marketing the proprietary GripShift sliding sleeve and the downhole frac isolation assembly under our Multistage Unlimited brand. Our Multistage Unlimited products and services enable customers to design completions with no practical limits on the number and placement of stages.
- From 2010 to 2012, we continued to grow our business in Canada while we developed new technology within our Multistage Unlimited brand suited for the higher pressures, higher temperatures and higher stage counts associated with unconventional resource development in the United States. Following the successful introduction of the technology, we increased our focus on the U.S. market beginning in late 2012.
- In 2013, we introduced our MultiCycle sliding sleeve technology. Our MultiCycle sliding sleeve can be opened and closed multiple times. A variation of our downhole frac isolation assembly was developed to enable a sequence we call “Shift-Frac-Close.” This sequence allowed us to close a sleeve immediately after the stage has been completed, sealing the proppant in the formation to significantly reduce proppant flowback and to enhance near-wellbore conductivity with the sleeves subsequently opened for production. Our MultiCycle sliding sleeves can be utilized during production to shut off unwanted water or natural gas production, for high pressure, pinpoint refracturing operations and for use as an injector in enhanced oil recovery programs, including waterflood operations.
- In 2013, we also introduced our AirLock casing buoyancy system, an added offering that can be utilized in conjunction with our Multistage Unlimited products and services. Our AirLock casing buoyancy system facilitates landing casing strings in horizontal wells without altering casing and cementing operations. The AirLock reduces the time needed to land casing in horizontal wells, saving time in casing running operations.
- In 2014, we introduced our Vector Max and Vector-1 liner hanger systems. The Vector Max and Vector-1 liner hangers were specifically designed to perform in complex horizontal wells and were fully compatible with our Multistage Unlimited products and services.
- In early 2015, we introduced ATRS, our specialized team of engineering consultants. ATRS works with customers to optimize completion designs and field development strategies and to evaluate well performance.
- During 2015 and 2016, we increased our focus on attracting and retaining major oil companies and large, independent E&P companies as customers. In addition, we increased our focus on the deep basins in Canada and in the Permian Basin in the U.S.
- In early 2017, we entered into a joint venture with one of our suppliers. We believe this will ensure that we have access to low-cost, high-quality machine shop services as we grow both in existing and new product lines.

We have a history of innovation. Since our inception in 2006, we have been granted 9 U.S. patents and 14 related international patents and have 40 U.S. patent applications pending and 51 related international patents pending. In 2014 and 2015, we received the *World Oil* Best Completions Technology Award for our Multistage Unlimited products and services and MultiCycle sliding sleeves, respectively.

In late 2012, the Advent Funds made a majority ownership investment in the company (the “Advent Transaction”). As part of that recapitalization, a $50.0 million subordinated note from Advent was utilized to

fund a portion of their investment. In April 2013, the subordinated note was repaid in connection with the incurrence of a $58.3 million term loan. In August 2014, we prepaid the remaining balance of the $58.3 million term loan and declared and paid a $150.0 million cash dividend which includes two components, (i) $146.9 million related to declared dividends and (ii) $3.1 million related to dividends treated as compensation, funded in part by cash generated from operations and in part by the incurrence of a new $180.0 million term loan under our Senior Secured Credit Facilities, which was borrowed in Canadian dollars ($197.6 million CAD). In late 2015, the Advent Funds and certain other of our stockholders made a $40.0 million equity investment in the company, with the proceeds utilized to prepay upcoming principal payments required by the Term Loan under our Senior Secured Credit Facilities. Due to a decline in the value of the Canadian dollar relative to the U.S. dollar from the funding of the $180.0 million Term Loan under our Senior Secured Credit Facilities until the prepayment date, we realized a gain of $10.8 million upon retirement of the debt as a result of the prepayment.

In April 2017, the Company's Board and stockholders approved an amendment to the amended and restated certificate of incorporation effecting a 3.00 for 1.00 stock split of the Company's issued and outstanding shares of common stock. The stock split was implemented on April 13, 2017. The par value of the common and preferred stock was not adjusted as a result of the stock split. All issued and outstanding share and per share amounts included in the accompanying financial statements have been adjusted to reflect this stock split for all periods presented.

Industry Trends Affecting our Results of Operations

Oil and Natural Gas Drilling and Completion Activity

Our products and services are primarily sold to North American E&P companies and sales of our products and services depend upon oil and natural gas drilling and production activity in North America. Oil and natural gas drilling and production activity is directly related to oil and natural gas prices. Oil and natural gas prices declined in 2014 and remained relatively low throughout 2015 and into 2016. While demand for our products and services has declined since late 2014 in connection with the commodity price decline, we believe that the demand for our products and services will increase over the medium and long-term as oil and natural gas prices rise from lows reached in mid-2016. According to Baker Hughes, the U.S. horizontal rig count averaged 587 in 2017 (through March 3, 2017) as compared to an average of 400 for the full year 2016. The average rig count in Canada in 2017 (through March 3, 2017) was 322, compared to 203 over the same period in 2016. According to Spears, the number of horizontal wells drilled in the United States is estimated to increase from 8,520 in 2016 to 16,834 in 2018, an increase of 98% and over the same period, the number of horizontal wells drilled in Canada is projected by Spears to increase by 73%.

Increasing Adoption of Pinpoint Stimulation

Traditional well completion techniques, including plug and perf and ball drop, currently account for the majority of unconventional well completions in North America. We believe that pinpoint stimulation provides substantial benefits compared to these traditional well completion techniques and that pinpoint stimulation has become increasingly utilized by operators in North America, particularly in Canada. Our ability to grow our market share, as evidenced by the percentage of horizontal wells in North America completed using our products and services, will depend in large part on the industry's continued adoption of pinpoint stimulation to complete wells.

Increasing Well Complexity and Focus on Completion Optimization

In recent years, E&P companies have drilled longer horizontal wells and completed more hydraulic fracturing stages per well to maximize the volume of hydrocarbon recoveries per well. This trend towards more complex wells has resulted in us selling more sleeves per well on average, which increases our revenue opportunity per well completion. Additionally, E&P companies have become increasingly focused on well

productivity through optimization of completion designs and we believe this trend will further the adoption of pinpoint stimulation, and in turn, increase the sale of our products and services if the operational benefits and long-term production results are observed by our customers.

How We Generate Revenues

We derived 93% and 95% of our revenues for the twelve months ended December 31, 2016 and 2015, respectively, from the sale of our Multistage Unlimited products and the provision of related services. The remainder of our revenues are generated from sales of our AirLock casing buoyancy system, our liner hanger systems and services provided by ATRS.

Product sales represented approximately 74% and 70% of our revenue for the twelve months ended December 31, 2016 and 2015, respectively. We have two primary models of sliding sleeves: our MultiCycle sliding sleeves and our GripShift sliding sleeves. Our MultiCycle sliding sleeves are sold at a higher price per sleeve as compared to our GripShift sliding sleeves, reflecting the additional features they incorporate. Most of our sales are on a just-in-time basis, as specified in individual purchase orders, with a fixed price for our sliding sleeves. We occasionally supply our customers with large orders that may be filled on negotiated terms. Tool charges and related services (which are classified together as “services” in our financial results) represented 26% and 30% of our revenues for the twelve months ended December 31, 2016 and 2015, respectively. Tool charges and related services relate to agreed rates we charge to our customers for the provision of our downhole frac isolation assembly and our personnel.

During periods of low drilling and well completion activity we will, in certain instances, lower the prices of our products and services. Our revenues are also impacted by well complexity, with wells with more stages resulting in longer jobs and increased revenue attributable to selling more sliding sleeves and the provision of our services.

For the twelve months ended December 31, 2016 and 2015, approximately 71% and 66%, respectively, of our revenues were derived from sales in Canada and were denominated in Canadian dollars. Because our Canadian contracts are typically invoiced in Canadian dollars, the effects of foreign currency fluctuations are regularly monitored. Foreign currency fluctuations had a negative $3.7 million impact on revenues for the twelve months ended December 31, 2016 as compared to the twelve months ended December 31, 2015, as the Canadian dollar weakened by 5% as compared to the U.S. dollar between these periods.

Although most of our sales are to North American E&P companies, we do have limited sales to customers outside of North America and expect sales to international customers to increase over time. These international sales are typically made to our local operating partners on a free on board basis with a point of sale in the United States. Some of the locations in which we have operating partners or sales representatives include Argentina, China, Russia and the Middle East. Our operating partners and representatives do not have authority to contractually bind our company, but market our products in their respective territories as part of their product or service offering.

Costs of Conducting our Business

Our cost of sales is comprised of expenses relating to the manufacture of our products in addition to the costs of our support services. Manufacturing cost of sales includes payments made to our suppliers for raw materials and payments made to machine shops for the manufacturing of components used in our products and costs related to our employees that perform quality control analysis, assemble and test our products. We recently entered into a joint venture which we believe will allow us to reduce our costs for certain product categories. Cost of sales for support services includes compensation and benefit-related expenses for employees who provide direct revenue generating services to customers in addition to the costs incurred by these employees for travel and subsistence while on site. Other cost of sales includes other variable manufacturing costs, such as shrinkage, obsolescence and revaluation or scrap related to our existing inventory. Approximately half of our cost of

revenues in Canada are denominated in Canadian dollars and, as a result, the impact of foreign currency exchange rates resulted in a $0.9 million decrease in cost of sales for the year ended December 31, 2016 as compared to 2015.

Our selling, general and administrative ("SG&A") expenses are comprised of compensation expense, which includes compensation and benefit-related expenses for our employees who are not directly involved in revenue generating activities, including those involved in our research and development activities, as well as all of our general operating costs. These general operating costs include, but are not limited to: rent and occupancy for our facilities, information technology infrastructure, software licensing, advertising and marketing, third party research and development, risk insurance and professional service fees for audit, legal and other consulting services. In 2015 and 2016, in response to decreased demand for our products and services resulting from the decline in E&P activity in our markets, we reduced our headcount and took certain other actions which resulted in restructuring charges, primarily severance expense. After the consummation of this offering, we expect to incur significant additional legal, accounting and other expenses associated with being a public company, including costs associated with our compliance with the Sarbanes-Oxley Act. Historically, approximately 40% of our SG&A expenses have been incurred in Canadian dollars.

Depreciation and amortization expense primarily consists of amortization of intangible assets, including assets related to our developed technology and in-process research and development, associated with the Advent Transaction. Depreciation and amortization expense also includes depreciation related to our tangible assets, which include investments in property and equipment. We expect to make capital expenditures to enhance the in-house R&D capabilities of our owned facility in Canada and expect depreciation and amortization expense to increase as a result of these capital expenditures in future periods.

We are subject to income taxes in both the United States and foreign jurisdictions in which we operate. Our historical effective tax rate differs from the applicable statutory tax rate primarily due to differences in the tax rate on our earnings in our foreign operations. The differences in our effective tax rate are due to changes in pre-tax income, certain book expenses not deductible for tax, as well as foreign deemed dividends and foreign tax credits included in the U.S. federal tax accrual. Starting in 2015, we were no longer able to utilize all of our foreign tax credits in our U.S. federal income tax return. The amount of foreign tax credit carryforwards as of December 31, 2016 and 2015 was approximately $0.9 million and $0.4 million, respectively.

Interest expense consists of accrued interest on our outstanding long-term debt, fees associated with the unused portion of our Revolving Credit Facility and amortization of debt issuance costs. We expect to repay all of our outstanding debt using the net proceeds of this offering, which will reduce our annual interest expense by $5.3 million. After we repay our outstanding debt using a portion of the net proceeds from this offering, the remaining balance of debt issuance costs will be approximately $1.7 million as of December 31, 2016. See "Use of Proceeds" and "Description of Material Indebtedness."

Foreign currency exchange (gain) loss, net consists primarily of gains and losses on foreign currency transactions, the majority of which is related to payments made on our outstanding debt, which is denominated in Canadian dollars. The foreign exchange rate used when we first entered into our Senior Secured Credit Facilities was approximately 0.91 U.S. dollars per Canadian dollar. Recently, foreign exchange rates between the Canadian dollar and the U.S. dollar have been between 0.73 and 0.80 U.S. dollars per Canadian dollar, which has resulted in us currently having a large unrealized gain on foreign currency exchange.

How We Evaluate our Results of Operations

Our management uses a variety of financial and operating metrics to analyze our performance. These metrics are significant factors in assessing our results of operations and profitability and include:

Revenues

We primarily sell our products and services under purchase orders with pricing negotiated on a one-off basis with each customer. Our revenues are generated primarily from the sales of our completion products and from services related to the utilization of our downhole frac isolation assembly.

Adjusted EBITDA

We believe Adjusted EBITDA (a non-GAAP measure) is useful to investors as a supplemental measure to evaluate our overall operating performance. Management uses Adjusted EBITDA as a measurement to compare our operating performance to our peers and competitors. We define Adjusted EBITDA as net income (loss) before interest expense, net, income tax expense (benefit) and depreciation and amortization further adjusted to exclude certain items which we believe are not reflective of our ongoing performance or which, in the case of share-based compensation, are non-cash in nature. We believe that Adjusted EBITDA is an important measure that excludes many of the costs associated with our existing capital structure and excludes costs that management believes do not reflect our ongoing operating performance. Accordingly, Adjusted EBITDA is a key metric that management uses to assess the period-to-period performance of our core business operations. Adjusted EBITDA helps to identify trends in the performance of our core ongoing operations by excluding the effects related to (i) non-cash items, such as share-based compensation expense, the amortization of intangible assets recorded as a result of the Advent Transaction, and realized and unrealized gains associated with fluctuations in foreign currency exchange rates and (ii) charges that do not relate to our operations, such as interest expense and income tax benefits. We believe that presenting Adjusted EBITDA enables investors to assess our performance from period to period using the same metric utilized by management and to evaluate our performance relative to other companies that are not subject to such factors. Adjusted EBITDA is also calculated in a manner consistent with the terms of the instruments governing our Senior Secured Credit Facilities (and the anticipated terms of our New Senior Secured Credit Facility). For a reconciliation of Adjusted EBITDA to net income (loss), the most directly comparable GAAP measure, see “Prospectus Summary—Summary Historical Consolidated Financial and Other Data.”

Free Cash Flow

We also utilize free cash flow to evaluate the cash generated by our operations and results of operations. We define “free cash flow” as net cash provided by operating activities less net cash used in investing activities, as presented in our Consolidated Statement of Cash Flows. Management believes free cash flow is useful because it provides information to investors regarding the cash that was available in the period that was in excess of our needs to fund our capital expenditures and other investment needs. Free cash flow does not represent our residual cash flow available for discretionary expenditures, as we have non-discretionary expenditures, including, but not limited to, interest and principal payments required under the terms of our Senior Secured Credit Facilities, that are not deducted in calculating free cash flow.

Total Sleeves Sold and Total Wells Completed

We also evaluate our performance using certain key operating data relating to levels of activity in our business, including, the number of wells completed using our technology, and the number of sleeves we sold to our customers. We use the operating metrics described above as measures of performance. Our management also evaluates and manages the performance of our business by comparing our current actual results against industry trends.

Results of Operations

The following table summarizes our revenues and expenses for the periods indicated.

	Year Ended December 31,	
	2016	2015
	(in thousands)	
Revenues:		
Product sales	$ 73,220	$ 80,079
Services	25,259	33,926
Total revenues	98,479	114,005
Cost of sales:		
Cost of product sales, exclusive of depreciation and amortization expense shown below	40,511	40,160
Cost of services, exclusive of depreciation and amortization expense shown below	13,322	14,553
Total cost of sales, exclusive of depreciation and amortization expense shown below	53,833	54,713
Selling, general and administrative expenses	37,061	37,804
Depreciation	1,766	2,695
Amortization	23,801	24,576
(Loss) from operations	(17,982)	(5,783)
Other (expense) income:		
Interest (expense), net	(6,286)	(8,064)
Other income (expense), net	45	(131)
Foreign currency exchange (loss) gain	(2,522)	25,779
Total other (expense) income	(8,763)	17,584
(Loss) income before income tax expense	(26,745)	11,801
Income tax (benefit)	(8,818)	(16,224)
Net (loss) income	$(17,927)	$ 28,025

Year Ended December 31, 2016 compared to Year Ended December 31, 2015

Revenues

Revenues were $98.5 million for the twelve months ended December 31, 2016 as compared to $114.0 million for the twelve months ended December 31, 2015. The decrease was a direct result of a decline in the sales of our completions products and services resulting from lower drilling and well completion activity in North America driven by declines in commodity pricing. Product sales for the twelve months ended December 31, 2016 were $73.2 million, as compared to $80.1 million for the twelve months ended December 31, 2015. We sold 25,816 sliding sleeves in 2016 as compared to 24,395 during 2015. The decreased revenue as compared to the increased sleeve quantity reflects pricing declines per sleeve and a shift in mix to lower-priced sleeve models during the period. Our service revenue was $25.3 million for the twelve months ended December 31, 2016 as compared to $33.9 million for the twelve months ended December 31, 2015. Our services were utilized in the completion of 892 wells during the twelve months ended December 31, 2016 as compared to 1,135 wells during the twelve months ended December 31, 2015.

Cost of sales

Cost of sales was $53.8 million, or 54.7% of revenues, for the twelve months ended December 31, 2016 as compared to $54.7 million, or 48.0% of revenues, for the twelve months ended December 31, 2015. The decrease

in cost of sales was primarily a result of a decline in the number of wells completed, partially offset by the higher volume of product sales. The higher percentage of revenues is related to the realized pricing concessions on all product lines in addition to the specific lower pricing related to excess inventory sales made at discounted prices. We believe we have reduced our excess inventory and the impact from any discounted sales will be less significant going forward. Offsetting some of these negative effects was improved pricing in conjunction with our strategic decision to manufacture products with a new international vendor in Mexico to produce certain products at a significantly lower cost, which began in the second quarter of 2016.

Selling, general and administrative expenses

SG&A expenses were $37.1 million for the twelve months ended December 31, 2016 as compared to $37.8 million for the twelve months ended December 31, 2015. The decrease was the direct result of headcount reductions in all functional areas, with the exception of engineering. In addition, discretionary spending was reduced to improve profitability during the prolonged market downturn. Offsetting these operating expense reductions were significant additional expenses incurred related to the initial public offering process.

Depreciation

Depreciation was $1.8 million for the twelve months ended December 31, 2016 as compared to $2.7 million for the twelve months ended December 31, 2015. The decrease is attributable to the reduction in the company's fleet of trucks along with a portion of our service tools becoming fully depreciated at the end of 2015.

Amortization

Amortization was $23.8 million for the twelve months ended December 31, 2016 as compared to $24.6 million for the twelve months ended December 31, 2015. The majority of the decrease in amortization was due to the decrease in the exchange rate between the Canadian dollar and the U.S. dollar from an average of 0.795 U.S. dollars per Canadian dollar for the twelve months ended December 31, 2015 to an average of 0.755 U.S. dollars per Canadian dollar for the twelve months ended December 31, 2016.

Interest (expense), net

Interest expense was $6.3 million for the twelve months ended December 31, 2016 as compared to $8.1 million for the twelve months ended December 31, 2015. The decrease was due to lower average debt outstanding for the twelve months ended December 31, 2016 as a result of a prepayment made on our Term Loan in December 2015 of $40.0 million in addition to a small favorable foreign exchange effect due to the weakening of the Canadian dollar of $0.2 million.

Other income (expense) net

Other expense, net was $0.05 million for the twelve months ended December 31, 2016 as compared to other income, net of ($0.1) million for the twelve months ended December 31, 2015.

Foreign currency exchange (loss) gain

Foreign currency exchange loss was ($2.5) million for the twelve months ended December 31, 2016 as compared to a gain of $25.8 million for the twelve months ended December 31, 2015. The decrease was directly due to the change in foreign currency exchange rates between the periods and the effect that the change had on the outstanding balance of debt on our Senior Secured Credit Facilities, which is denominated in Canadian dollars, within each respective period. Foreign exchange rates between the U.S. dollar and the Canadian dollar increased from 0.723 U.S. dollars per Canadian dollar to 0.744 U.S. dollars per Canadian dollar, or 2.9%, over the period from January 1, 2016 to December 31, 2016. The rate during the same period in 2015 dropped 16.1% from a beginning rate of 0.862 U.S. dollars per Canadian dollar to 0.723 U.S. dollars per Canadian dollar.

Income tax expense (benefit)

Income tax benefit was ($8.8) million for the twelve months ended December 31, 2016 as compared to a benefit of ($16.2) million for the twelve months ended December 31, 2015. For the twelve months ended December 31, 2016 and 2015 our effective income tax rates were approximately 33.0% and (137.5%), respectively. The difference in the effective income tax rate for the twelve months ended December 31, 2016 and for the twelve months ended December 31, 2015 was due to a tax planning strategy implemented in 2015 and the effect of our outside basis book and tax differences in our Canadian subsidiary. The tax planning strategy was a change to the foreign company's year end to conform to United States income tax reporting.

Quarterly Results of Operations

The following table sets forth statement of operations data for each of the quarters presented during the year ended December 31, 2016. We have prepared the quarterly statement of operations data on a basis consistent with the audited consolidated financial statements included elsewhere in this prospectus. In the opinion of management, the financial information reflects all adjustments, consisting of normal recurring adjustments, which we consider necessary for a fair presentation of this data. This information should be read in conjunction with the audited consolidated financial statements and related notes included elsewhere in this prospectus. The results of historical periods are not necessarily indicative of the results for any future period.

	Three months ended,			
	March 31, 2016	June 30, 2016	September 30, 2016	December 31, 2016
	(unaudited) (in thousands, except share and per share amounts)			
Product sales and services revenue	$ 23,107	$ 11,281	$ 28,650	$ 35,441
Cost of product sales and services (exclusive of depreciation and amortization expense shown below)	12,695	6,489	14,713	19,936
Selling, general and administrative expenses	8,455	8,417	8,491	11,698
Depreciation and amortization	6,223	6,542	6,463	6,339
(Loss) from operations	(4,266)	(10,167)	(1,017)	(2,532)
Interest (expense)	(1,466)	(1,590)	(1,682)	(1,548)
Other income (expense), net	26	(37)	(18)	74
Foreign currency exchange (loss) gain	(5,878)	(451)	1,615	2,192
(Loss) income before income tax expense	(11,584)	(12,245)	(1,102)	(1,814)
Income tax (benefit)	(3,458)	(3,655)	(822)	(883)
Net (loss)	$ (8,126)	$ (8,590)	$ (280)	$ (931)
Per share information:				
Basic net (loss) per share	$ (0.24)	$ (0.25)	$ (0.01)	$ (0.03)
Diluted net (loss) per share	$ (0.24)	$ (0.25)	$ (0.01)	$ (0.03)
Weighted average common shares outstanding:				
Basic	34,018,926	34,000,578	34,004,569	34,005,978
Diluted	34,018,926	34,000,578	34,004,569	34,005,978

Seasonality

A substantial portion of our business is subject to quarterly variability. In Canada, we typically experience higher activity levels in the first quarter and fourth quarter of each year, as our customers take advantage of the winter freeze to gain access to remote drilling and production areas. In the past, our revenue in Canada has declined during the second quarter due to warming weather conditions that result in thawing, softer ground, difficulty accessing drill sites and road bans that curtail drilling and completion activity. Access to well sites

typically improves throughout the third quarter in Canada, leading to activity levels that are higher than in the second quarter, but lower than activity in the first and fourth quarters. Our business can also be impacted by a reduction in customer activity during the winter holidays in late December and early January.

Liquidity and Capital Resources

Our primary sources of liquidity are, and after the completion of this offering are expected to continue to be, our existing cash and cash equivalents, cash provided by operating activities, borrowings under our Senior Secured Credit Facilities, proceeds from sales of our equity securities and proceeds from this offering. As of December 31, 2016, we had cash and cash equivalents of $18.3 million and availability under the Revolving Credit Facility of $20.0 million. Our total indebtedness was $90.8 million as of December 31, 2016. See "Description of Material Indebtedness." After giving effect to the application of the estimated net proceeds from this offering, we expect to have no indebtedness. See "Use of Proceeds." Additionally, concurrently with the closing of this offering, we and certain of our subsidiaries intend to enter into the New Senior Secured Credit Facility. The New Senior Secured Credit Facility consists of revolving credit facilities in aggregate principal amount of $50.0 million. See "Description of Material Indebtedness—New Senior Secured Credit Facility."

Our principal liquidity needs have been, and are expected to continue to be, capital expenditures, working capital, debt service and potential mergers and acquisitions. On February 1, 2017, we contributed $5.4 million in exchange for a 50% interest in a joint venture, which was funded from available cash. Concurrent with entering into the joint venture, we made a $3.0 million Term Loan prepayment, also funded from available cash, and the previous owner of the 50% interest repaid in full a $1.0 million promissory note to us. Historically capital expenditures have been relatively modest, but future planned capital expenditures include investing in our owned facility in Canada to create a research and development facility for product development as well as to more fully demonstrate the capabilities and benefits of our products to our customers. We plan to incur approximately $5.0 million to $8.0 million in capital expenditures in 2017.

We believe that our cash flow from operations, availability under our credit facilities and available cash and cash equivalents will be sufficient to meet our liquidity needs for at least the foreseeable future. We anticipate that to the extent that we require additional liquidity, it will be funded through the incurrence of additional indebtedness, the proceeds of equity issuances, or a combination thereof. We cannot assure you that we will be able to obtain this additional liquidity on reasonable terms, or at all. Our liquidity and our ability to meet our obligations and fund our capital requirements are also dependent on our future financial performance, which is subject to general economic, financial and other factors that are beyond our control. Accordingly, we cannot assure you that our business will generate sufficient cash flow from operations or that funds will be available from additional indebtedness, the capital markets or otherwise to meet our liquidity needs. Although we have no current plans to do so, if we decide to pursue one or more significant acquisitions, we may incur additional debt or sell additional equity to finance such acquisitions, which would result in additional expenses or dilution.

Cash Flows

The following table provides a summary of cash flows from operating, investing and financing activities for the periods presented:

	Years Ended December 31,	
	2016	2015
	(in thousands)	
Net cash provided by operating activities	$10,684	$ 4,369
Net cash (used in) investing activities	(1,840)	(1,221)
Net cash (used in) financing activities	(315)	(12,766)
Effect of exchange rate changes on cash and cash equivalents	201	(1,008)
Net change in cash and cash equivalents	$ 8,730	$(10,626)

Operating Activities

Net cash provided by operating activities was $10.7 million and $4.4 million for the twelve months ended December 31, 2016 and 2015, respectively. The increase in 2016 was primarily related to an increase in business activity in the fourth quarter that resulted in accounts payable, accrued expenses and taxes payable all being higher, along with lower inventory. Offsetting these increases were higher accounts receivables and lower net income for the year.

Investing Activities

Net cash used in investing activities was $1.8 million and $1.2 million for the twelve months ended December 31, 2016 and 2015, respectively. The increase in cash used in investing activities during the twelve months ended December 31, 2016 as compared to the twelve months ended December 31, 2015 primarily was due to the funding of a $1.0 million short term loan to a supply chain partner to support expenditures required for our business activity.

Financing Activities

The net cash used in financing activities was $0.3 million and $12.8 million for the twelve months ended December 31, 2016 and 2015, respectively. The cash used in financing activities for twelve months ended December 31, 2015 primarily related to amortization payments of the Term Loan under our Senior Secured Credit Facilities.

Senior Secured Credit Facilities

On August 7, 2014, Pioneer Investment, Inc. and Pioneer Intermediate, Inc., each wholly owned subsidiaries of the company along with certain of their subsidiaries entered into our Senior Secured Credit Facilities. As of December 31, 2016, we had $90.8 million outstanding under the Term Loan under our Senior Secured Credit Facilities and no debt outstanding under the Revolving Credit Facility. Availability under the Revolving Credit Facility was $20.0 million at December 31, 2016.

Our Senior Secured Credit Facilities were amended on April 15, 2015 to, among other things, amend certain financial covenants contained therein. Our Senior Secured Credit Facilities were further amended on December 22, 2015 to, among other things, further amend the financial covenants, to evidence the prepayment of the Term Loan in an amount of $55,784,000 CAD and the reduction of the commitments under our Revolving Credit Facility from $38,430,000 CAD to $27,800,000 CAD and to reduce the amount available for swingline loans under our Revolving Credit Facility from $10,000,000 CAD to $5,000,000 CAD.

Borrowings under our Senior Secured Credit Facilities bear interest at a rate per annum equal to the applicable margin plus a base rate determined by reference to the highest of either: (a) in the case of loans denominated in U.S. dollars, at our election, either (i) (A) the federal funds rate plus 0.5%, (B) one-month LIBOR plus 1.00% and (C) the prime commercial lending rate of the administrative agent as in effect on the relevant day or (ii) the LIBOR rate determined by reference to the applicable Reuters screen two business days prior to the commencement of the interest period relevant to the subject borrowing or (b) in the case of loans denominated in Canadian dollars, at our election, either (i)(A) the prime commercial lending rate of the administrative agent as in effect on the relevant day for determining interest rates on Canadian dollar denominated commercial loans made in Canada and (B) CDOR plus 1.0% or (ii) the CDOR rate determined by reference to the applicable Reuters screen page for a term equal to the interest period or contract period relevant to the subject borrowing. The applicable margin is determined based upon the leverage ratio of the company. See “Description of Material Indebtedness.”

The credit agreement governing our Senior Secured Credit Facilities requires us to comply with certain affirmative and negative covenants. As of December 31, 2016 and 2015, we were in compliance with all such

covenants. The obligations under our Senior Secured Credit Facilities are secured by first priority security interests in substantially all of the assets of the Company and the guarantors.

Contractual Obligations

The following table presents our contractual obligations and other commitments as of December 31, 2016.

	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
			(in thousands)		
Equipment lease obligations	$ 454	$ 246	$ 196	$ 12	$ —
Senior Secured Credit Facilities	90,836	772	90,064	—	—
Interest on long-term debt	12,259	5,441	6,818	—	—
Equipment and office operating leases	4,090	1,499	2,168	392	31
	$107,639	$ 7,958	$99,246	$ 404	$ 31

Off-Balance Sheet Arrangements

We have no off-balance sheet financing arrangements.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses. Certain of our accounting policies require the application of significant judgment by management in selecting the appropriate assumptions for calculating financial estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. Our actual results may differ from these estimates. The accounting policies that we believe to be the most critical to an understanding of our financial condition and results of operations and that require the most complex and subjective management judgments are discussed below.

Revenue Recognition

We recognize revenue when it is determined that the following criteria are met: (i) persuasive evidence of an arrangement exists; (ii) delivery has occurred or services have been rendered; (iii) the fee is fixed or determinable; and (iv) collectability is reasonably assured. Proceeds from customers for the cost of oilfield service equipment that is damaged or lost-in-hole are reflected as revenues. For the twelve months ended December 31, 2016, the company recognized revenue from its largest customer totaling approximately $25.5 million, or 26%. Amounts due from this customer included in trade accounts receivable was approximately $7.8 million, or 24% of trade accounts receivable, as of December 31, 2016. No other customer individually accounted for 10% or more of our consolidated revenue during 2016 or trade receivable accounts balance as of December 31, 2016. For the twelve months ended December 31, 2015 the same customer accounted for $35.1 million, or approximately 31% of total revenue, and as of December 31, 2015, $4.4 million in trade accounts receivable were due from this customer, or 17% of trade accounts receivable.

We recognize revenue based upon a purchase order, contract or other persuasive evidence of an arrangement with the customer that includes a fixed or determinable price, provided that collectability is reasonably assured, but it does not include right of return or other similar provisions or other significant post-delivery obligations. Revenue is recognized for products generally upon installation and when the customer assumes the risks and rewards of ownership. In cases where services are being performed, we generally do not recognize revenue until a job has been completed, which includes a customer signature or acknowledgement and that there are no

additional services or future performance obligations required by us. Rates for services are typically priced on a per day, per man-hour or similar basis that include both the cost of the downhole frac isolation assembly and our personnel required to supervise the operation of the assembly. Proceeds from customers for the cost of oilfield equipment that is damaged or lost-in-hole are reflected as revenues when payment is received.

Historically, we have not experienced significant customer complaints regarding our products or services and therefore we have elected not to implement separate warranty provisions, and instead record any such instances on an actual basis as they occur.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for estimated losses that may result from the inability of our customers to make required payments. Earnings are charged with a provision for doubtful accounts based on a current review of the collectability of customer accounts by management. Such allowances are based upon several factors including, but not limited to, credit approval practices, industry and customer historical experience as well as the current and projected financial condition of the specific customer. Accounts deemed uncollectible are applied against the allowance for doubtful accounts. We have recorded approximately $70,000 and $445,000 in provisions for doubtful accounts as of December 31, 2016 and 2015, respectively.

Inventories

Inventories consist primarily of raw material, sliding sleeve components, assembled sliding sleeves and certain components used to construct our frac isolation assemblies. Inventories are stated at the lower of cost or estimated net realizable value. Cost is determined at standard costs approximating the first-in first-out basis. We continuously evaluate inventories, based on an analysis of inventory levels, historical sales experience and future sales forecasts, to determine obsolete, slow-moving and excess inventory. Adjustments to reduce such inventory to its estimated recoverable value have been recorded by management as an adjustment to cost of sales.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Equipment held under capital leases are stated at the present value of minimum lease payments. Expenditures for property and equipment and for items which substantially increase the useful lives of existing assets are capitalized at cost and depreciated over their estimated useful life utilizing the straight-line method. Routine expenditures for repairs and maintenance are expensed as incurred. Depreciation is calculated over the estimated useful lives of the related assets using the straight-line method. Leasehold improvements and property under capital leases are amortized over the shorter of the remaining lease term or useful life of the related asset. Depreciation expense includes amortization of assets under capital leases. The cost and related accumulated depreciation of assets retired or otherwise disposed of are eliminated from the accounts, and any resulting gains or losses are recognized in other (expense) income, net in the year of disposal.

Depreciation on property and equipment, including assets held under capital leases, is calculated using the straight-line method over the following useful service lives or lease term (which includes reasonably assured renewal periods):

	Years
Buildings	30
Building equipment	5-15
Machinery and equipment	12
Furniture and fixtures	3-5
Computers and software	3-5
Vehicles and service equipment	3-4
Leasehold improvements	Lease term (1-4)

We periodically assess potential impairment of our property and equipment, when events or changes in circumstances occur that indicate the carrying value of the asset or asset group may not be recoverable. The assessment of possible impairment is based on our overall valuation calculation using forward looking as well as historical computations to measure the value of the company. If the overall valuation results are less than the carrying value of such assets, an impairment loss with respect to property and equipment is recognized for the difference between estimated fair value and carrying value. No impairment loss has been recognized for the years ended December 31, 2016 and 2015.

Goodwill and Intangible Assets

For goodwill, an assessment for impairment is performed annually or when there is an indication an impairment may have occurred. We complete our annual impairment test for goodwill using an assessment date in the fourth quarter of each fiscal year. Goodwill is reviewed for impairment by comparing the carrying value of the reporting unit's net assets (including allocated goodwill) to the fair value of the reporting unit. The fair value of the reporting unit is determined using a discounted cash flow approach. Determining the fair value of a reporting unit requires the use of estimates and assumptions. The principal estimates and assumptions that we use include revenue growth rates, operating margins, weighted average costs of capital, a terminal growth rate, and future market conditions. We believe that the estimates and assumptions used in impairment assessments are reasonable. If the reporting unit's carrying value is greater than its fair value, a second step is performed whereby the implied fair value of goodwill is estimated by allocating the fair value of the reporting unit in a hypothetical purchase price allocation analysis. We recognize a goodwill impairment charge for the amount by which the carrying value of goodwill exceeds its fair value. Any impairment losses are reflected in operating income. We concluded that there was no impairment of goodwill in 2016 or 2015, based on our annual impairment analysis.

All identifiable intangibles are amortized on a straight-line basis over the estimated useful life or term of related agreements as indicated above. Deferred loan costs are amortized to interest expense using the effective interest method. These assets are tested for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. We concluded there was no impairment of identifiable intangibles in 2016 or 2015.

Income Taxes

NCS Multistage Holdings, Inc. is taxed as a corporation as defined under the Internal Revenue Code. The liability method is used in accounting for deferred income taxes. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when these differences are expected to reverse. The realizability of deferred tax assets is evaluated annually and a valuation allowance is provided if it is more likely than not that the deferred tax assets will not give rise to future benefits. We recognize tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained, based upon technical merits, upon examination by the taxing authorities. If the income tax position is expected to meet the more likely than not criteria, the benefit recorded in the consolidated financial statements equals the largest amount that is greater than 50% likely to be realized upon its ultimate settlement. A valuation allowance to reduce deferred tax assets is established when it is more likely than not that some portion or all the deferred tax assets will not be realized. As of December 31, 2016 and 2015, the valuation allowance was approximately $63,000 and $63,000, respectively. We recognize accrued interest and penalties related to uncertain tax positions in other income (expense). During the twelve months ended December 31, 2016 and 2015, we recognized approximately $129,000 and $82,000, respectively, in interest and penalties. We had approximately $411,000 and $664,000 in interest and penalties accrued at December 31, 2016 and 2015, respectively.

Our Canadian subsidiary guaranteed the credit facilities of our U.S. entities. Under U.S. federal income tax rules, this guarantee results in all of the earnings and profits of our Canadian subsidiary being subject to current U.S. tax. As a result, we have recognized a U.S. deferred tax liability related to a portion of our outside basis differences in our Canadian subsidiary for which we are unable to assert indefinite reinvestment. No U.S. deferred taxes have been recognized on the portion of our outside basis differences that we continue to

indefinitely reinvest. Upon reversal of these outside basis differences through dividends or otherwise, we may be subject to U.S. income taxes (subject to adjustment for foreign tax credits) and foreign withholding taxes. It is not practical, however, to estimate the amount of taxes that may be payable on the eventual remittance of these temporary differences after consideration of available foreign tax credits.

We completed our analysis of our tax positions and believe there are no material uncertain tax positions that would require derecognition in the consolidated financial statements as of December 31, 2016 and 2015. We believe that there are no tax positions taken or expected to be taken that would significantly increase or decrease unrecognized tax benefits within the next twelve months following the balance sheet date. As of December 31, 2016 and 2015, there were no material amounts that had been accrued with respect to uncertain tax positions.

We file income tax returns in the United States and in various state and foreign jurisdictions. Our U.S. income tax returns for 2011 and subsequent years remain open for examination. The Internal Revenue Service ("IRS") commenced an examination of our United States income tax return for 2011 through 2012 in the first quarter of 2014 which was completed in 2015. No tax adjustments were proposed. Additionally, subsequent to December 31, 2015, the IRS commenced an examination of our United States income tax return for 2014 in the second quarter of 2016. No tax adjustments have been proposed.

Share-Based Compensation

We recognize compensation cost for all share-based payment transactions with employees, including compensation cost associated with the grant of options for our common stock using the fair value method. Expense is recognized over the requisite service period based upon the number of options or shares expected to ultimately vest.

The following table presents the timing of time vested options granted, number of underlying shares and related exercise prices of stock options granted between January 1, 2015 and December 31, 2016, along with the fair value per share of common stock utilized to calculate share-based compensation expense.

Grant Timing	Shares Underlying Options	Common Stock Fair Value Per Share as of Grant Date	Exercise Price Per Option
2015:			
First Quarter	—	$ —	$ —
Second Quarter	13,605	$ 4.84	$ 11.82
Third Quarter	—	$ —	$ —
Fourth Quarter	8,289	$ 9.55	$ 0.003
2016:			
First Quarter	—	$ —	$ —
Second Quarter	11,796	$ 4.24-4.47	$ 8.96-9.55
Third Quarter	12,552	$ 4.40-5.45	$ 9.55-9.81
Fourth Quarter	—	$ —	$ —

Determining fair market value

Determining the appropriate fair value model and calculating the fair value of options requires the input of highly subjective assumptions, including the expected volatility of the price of our stock, the risk-free rate, the expected term of the options and the expected dividend yield of our common stock. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, our share-based compensation expense could be materially different in the future. We estimate the fair value of each option grant using the Black-Scholes option-pricing model. The Black-Scholes option pricing model requires estimates of key assumptions based on both historical information and management judgment regarding market factors and trends.

Expected volatility—We developed our expected volatility by using the historical volatilities of the our peer group of public companies for a period equal to the expected life of the option by taking the median of the annualized weekly ten year standard deviation of their stock prices.

Risk-free interest rate—The risk-free interest rates for options granted are based on the ten year constant maturity Treasury bond rates whose term is consistent with the expected life of an option from the date of grant.

Expected term—As we do not have sufficient historical experience for determining the expected term of the stock option awards granted, we based our expected term for awards issued to employees on the "simplified" method under the provisions of ASC Topic 718-10, Compensation-Stock Compensation. The expected term is based on the midpoint between the vesting date and contractual term of an option. The expected term represents the period that our stock-based awards are expected to be outstanding.

Expected dividend yield—We do not anticipate paying cash dividends on our shares of common stock; therefore, the expected dividend yield is assumed to be zero.

The fair value of each option granted in 2015 and 2016 was estimated on the date of grant using the Black-Scholes- Merton method, with the following weighted average assumptions being used:

	Years Ended December 31,	
	2016	2015
Expected volatility	42-44.7%	43%
Average risk free interest rate	1.69%	2.29%
Expected term (in years)	6.5	6.5
Expected dividends	—	—

In conjunction with the stock options issued above, we also issued "Liquidity Awards." These Liquidity Awards will become 100% vested on the effective date of a change in control of the company. Accordingly, no value has been reflected in the consolidated financial statements for the Liquidity Awards as the stock options will not vest until the occurrence of a change in control event. The completion of this offering will not constitute a change in control event. In connection with this offering, the Liquidity Awards shall be amended to provide that such awards shall vest over three years, with 33% vesting each year beginning on the first anniversary of the consummation of this offering, subject to accelerated vesting upon a Company Sale (as defined in our 2012 Equity Incentive Plan), provided that on each applicable vesting date the award holder is still employed by us.

Qualitative and Quantitative Disclosures About Market Risk

Commodity Price Risk

The market for our products and services is indirectly exposed to fluctuations in the prices of crude oil and natural gas to the extent such fluctuations impact drilling and completion activity levels and thus impact the activity levels of our customers in the exploration and production industries. Additionally, because we do not sell our products under long-term contracts, we believe we are particularly exposed to short-term fluctuations in the prices of crude oil and natural gas. We do not currently intend to hedge our indirect exposure to commodity price risk.

Foreign Currency Exchange Rate Risk

A substantial amount of our revenues are derived in Canada and, accordingly, our competitiveness and financial results are subject to foreign currency fluctuations where revenues and costs are denominated in Canadian dollars rather than U.S. dollars. During the twelve months ended December 31, 2016 and 2015, approximately 71% and 66%, respectively, of our revenues were attributable to our operations in Canada. We have indirectly hedged our exposure to adverse changes in foreign currency exchange rates by having our Senior Secured Credit Facilities denominated in Canadian dollars, which allows us to have a significant amount of our fixed costs related to interest and principal payments on our Senior Secured Credit Facilities denominated in Canadian dollars. In connection with this offering we intend to repay the Term Loan under our Senior Secured

Credit Facilities in full and may use foreign currency forward exchange contracts to hedge our future exposure to the Canadian dollar.

Interest Rate Risk

We are primarily exposed to interest rate risk through our Revolving Credit Facility and the Term Loan under our Senior Secured Credit Facilities. As of December 31, 2016, we had $90.8 million, in variable rate long-term debt outstanding under our Term Loan, which bears interest at a rate per annum equal to the applicable margin, plus a base rate determined by reference to the highest of either: (a) in the case of loans denominated in U.S. dollars, at our election, either (i) (A) the federal funds rate plus 0.5%, (B) one-month LIBOR plus 1.00% and (C) the prime commercial lending rate of the administrative agent as in effect on the relevant day or (ii) the LIBOR rate determined by reference to the applicable Reuters screen two business days prior to the commencement of the interest period relevant to the subject borrowing or (b) in the case of loans denominated in Canadian dollars, at our election, either (i)(A) the prime commercial lending rate of the administrative agent as in effect on the relevant day for determining interest rates on Canadian dollar denominated commercial loans made in Canada and (B) CDOR plus 1.0% or (ii) the CDOR rate determined by reference to the applicable Reuters screen page for a term equal to the interest period or contract period relevant to the subject borrowing.

As of December 31, 2016, we had no borrowings outstanding under our Revolving Credit Facility. We expect to repay our Term Loan with the net proceeds of this offering. We also expect to terminate our Senior Secured Credit Facilities following the closing of this offering and enter into a new revolving credit facility at or shortly after the closing of this offering. See “Description of Material Indebtedness—New Senior Secured Credit Facility.”

Credit Risk

Our customers are E&P companies and other oilfield services companies. This concentration of counterparties operating in a single industry may increase our overall exposure to credit risk, in that the counterparties may be similarly affected by changes in economic, regulatory or other conditions. We manage credit risk by analyzing the counterparties’ financial condition prior to accepting new customers and prior to adjusting existing credit limits.

Effects of Inflation

We do not believe that the effects of inflation have had a material effect on our business, financial condition or results of operations. However, if our costs become subject to significant inflationary pressures, we may not be able to offset such increased costs through price increases. Our inability or failure to offset any such cost increases in the future could have a material adverse effect on our business, financial condition and results of operations.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued Accounting Standards Update (“ASU”) No. 2016-02, *Leases* (ASC 842), which replaces the existing guidance in ASC 840, *Leases*. ASC 842 requires lessees to recognize most leases on their balance sheets as lease liabilities with corresponding right-of-use assets. The new lease standard does not substantially change lessor accounting. The new standard is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted. We are currently evaluating the impact of the adoption of this guidance.

In November 2015, the FASB issued ASU No. 2015-17, *Balance Sheet Classification of Deferred Taxes*. This standard requires all deferred taxes, along with any related valuation allowance, to be presented as a noncurrent deferred asset or liability. The guidance is effective for fiscal years beginning after December 15, 2016, and includes interim periods within those fiscal years. Early adoption is permitted and the guidance may be applied either prospectively, for all deferred tax assets and liabilities, or retrospectively by reclassifying the comparative balance sheet. We do not expect this ASU to have a material impact on our financial statements.

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*, which requires companies to measure inventory at the lower of cost or net realizable value rather than at the lower of cost or

market. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The new standard is effective for the Company for the fiscal year beginning after December 15, 2016 and interim periods within those fiscal years. The Company has early adopted the guidance of as January 1, 2016 and there was no material impact on our financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements—Going Concern*. The new standard requires management to evaluate whether there are conditions and events that raise substantial doubt about an entity's ability to continue as a going concern for both annual and interim reporting periods. The guidance is effective for the Company for the annual period ending after December 15, 2016 and interim periods thereafter. Management performed an evaluation of the Company's ability to fund operations and to continue as a going concern according to ASC Topic 205-40, *Presentation of Financial Statements – Going Concern*. The guidance did not have a material impact on our financial statements.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The new standard is effective for annual reporting periods beginning after December 15, 2017 and early adoption is permitted, however, not before fiscal years beginning after December 15, 2016. Subsequent to ASU 2014-09's issuance, Topic 606 was amended for FASB updates that changed the effective date as well as addressing certain aspects regarding new revenue standards. The comprehensive new standard will supersede existing revenue recognition guidance and require revenue to be recognized when promised goods or services are transferred to customers in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. Adoption of the new rules could affect the timing of revenue recognition for certain transactions. The guidance permits two implementation approaches, one requiring retrospective application of the new standard with restatement of prior years and one requiring prospective application of the new standard with disclosure of results under old standards. We are currently evaluating this standard in order to select a transition method and effective date. We have not determined the effect of this standard on our financial statements and related disclosures.

OUR INDUSTRY

As a provider of multistage completion equipment and services, we participate in the market for completion equipment and services, which is estimated by Spears to be an $8.6 billion global market, 60% of which is generated in North America. The completion equipment and services sector includes large and international companies (including Halliburton Company, Schlumberger Limited, Baker Hughes Incorporated and Weatherford International Ltd.) as well as smaller, independent companies, including ourselves, that may operate in specific product or service categories within the overall market, or that operate primarily on a regional basis.

We believe that customers of completion equipment and services select providers based on a number of factors, including technology, service quality, safety track record and price. We believe that we are well-positioned to compete in all of these dimensions.

Over the past decade, E&P companies have increasingly focused on exploiting the vast hydrocarbon reserves contained in North America's unconventional oil and natural gas reservoirs by utilizing horizontal drilling and hydraulic fracturing. According to Spears, in 2016, over 55% of all onshore wells drilled in the United States and over 80% of all onshore wells in Canada included horizontal well sections, or laterals, an increase from 30% and 62%, respectively in, 2011. According to Spears, horizontal wells accounted for 79% of total onshore drilling and completion spending in the United States and 95% of total onshore drilling and completion spending in Canada in 2016.

Hydraulic fracturing is a well stimulation technique in which rock is fractured by a pressurized fluid. The process involves the high-pressure injection of fluids and proppants into a wellbore to create cracks in the deep-rock formations. When the hydraulic pressure is removed from the well, proppants hold the fractures open, creating a conductive channel through which the hydrocarbons can flow more freely from the formation to the wellbore and then to the surface.

Multistage completion equipment and services provide entry points into the deep-rock formations to enable stimulation and provide the isolation between stages that allow for stimulation treatments to be more effective. Multistage completions in horizontal wells typically begin with a stage at the end of the lateral farthest away from the vertical section of the wellbore, often referred to as the "toe." As an oil or natural gas well is completed, each subsequent stage is completed in succession moving from the toe to the section of the horizontal wellbore closest to the vertical section, often referred to as the "heel." As the well is completed, each stage is isolated from the stages that have been completed before it. The process is similar in vertical wells, with the first stage completed being the one at the greatest vertical depth, and the last stage at the shallowest depth.

The most commonly used completion technique for unconventional wells is plug and perforate, or "plug and perf." The plug and perf technique uses a tool called a perf gun to create clusters of holes, or perforations, in a section of the casing of the wellbore. After the perf gun has been removed from the well, the formation is hydraulically fractured through the newly created clusters of perforations, connecting the wellbore to the surrounding reservoir. After the frac stage is completed, the well is temporarily plugged just above the recently stimulated section and the perforation and hydraulic fracturing process is repeated until the number of desired frac stages have been placed. This technique is most commonly applied in wells in which the well's casing or lining has been cemented in place.

"Ball drop" is another technique commonly used in open hole, or uncemented, well configurations. This technique utilizes a series of sliding sleeves pre-installed in the well's casing or lining during well construction. Rather than using a perf gun to create openings, a specially sized ball is dropped into the well prior to each stage being hydraulically fractured. The size of the ball allows it to pass through to a matching "seat" profile on a sleeve in the well, where it acts both to enable the shifting of the sleeve, exposing ports to the formation, and to plug the wellbore below, providing isolation. Ball drop systems typically rely on different ball sizes to activate the sleeves and, as a result, the wellbore will increasingly narrow toward the "toe" and the number of sleeves and stages that can be fractured can be limited by available ball sizes.

E&P companies have increasingly adopted techniques and equipment that drive more effective resource recovery, including longer-length well laterals, closer spacing of hydraulic fracturing stages, a higher number of stages per well and more volume of fluid and proppant used per well and per foot of lateral. Additionally, as E&P companies have begun to move toward infill and development drilling, the spacing between wells has decreased, and is expected to continue to decrease, highlighting the need for more precise drilling and completion techniques.

While plug and perf and ball drop techniques have traditionally been used in unconventional well completions, these techniques have several drawbacks that limit their ability to optimize completions and maximize hydrocarbon recovery. Limitations associated with traditional well completion techniques include:

- inconsistent and uncontrollable placement of fractures that cannot be reliably repeated from stage to stage due to variable breakdown pressures and leading to under-stimulation of wells;
- inability to monitor downhole pressure or measure pressures and temperatures during stimulation, limiting control and making optimization more challenging;
- inability to close and reopen perforations and sleeves, limiting options for customers following the initial completion; and
- completion designs resulting in under-stimulation of wells to reduce the likelihood of an operational issue referred to as a “screenout” which can result in a costly recovery process.

To reduce the amount of under-stimulated reservoir area that can occur when using these traditional techniques, many E&P companies are reducing the spacing between stages, thereby increasing the number of stages per well. However, increasing stage counts with traditional completion techniques can result in other operational inefficiencies such as increased time and expense in the case of plug and perf completions, or, in the case of ball drop completions, the inability to place the desired number of stages due to the limited number of ball and seat sizes available. We believe there is significant opportunity for growth and expansion for providers that introduce innovative technology that allows customers to efficiently increase stage counts, have more control during the well stimulation process and better measure their well completions results.

Industry Trends

The oil and natural gas industry has traditionally been volatile and is influenced by a combination of long-term, short-term and cyclical trends, including the domestic and international supply and demand for oil and natural gas, current and expected future prices for oil and natural gas and the perceived stability and sustainability of those prices, production depletion rates and the resultant levels of cash flows generated and capital allocated by exploration and production companies to their budgets for drilling, completion and production activities. The oil and natural gas industry is also impacted by general domestic and international economic conditions, political instability in oil producing countries, government regulations (both in the United States and elsewhere), levels of customer demand, the availability of pipeline capacity and other conditions and factors that are beyond our control.

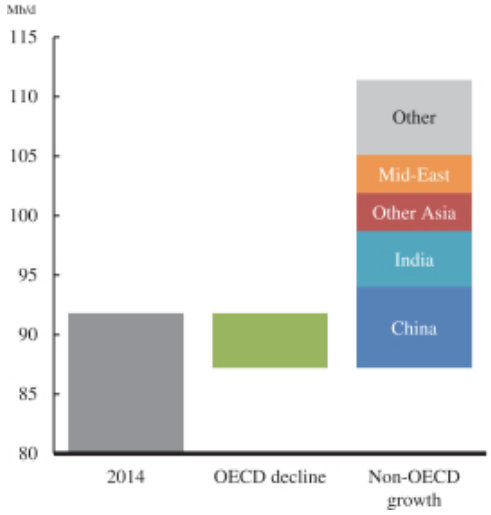
Demand for our products and services depends substantially on the level of expenditures by companies in the oil and natural gas industry. The significant decline in oil and natural gas prices beginning in late 2014 continued into the first part of 2016. This low commodity price environment has caused a reduction in the drilling, completion and other production activities of most of our customers and their spending on our products and services.

The reduction in demand resulted in declining prices for our products and services, a trend that continued in the first six months of 2016. As oil and natural gas prices began to recover in mid-2016, we have experienced an increase in demand for our products and services. If near term commodity prices stabilize at or increase from current levels, we expect to experience a further increase in demand for our equipment and services.

Although volatility is likely to persist in the industry, we believe that the following trends will positively impact the completions equipment and services market, and providers of multistage completions products and services in particular, in the coming years:

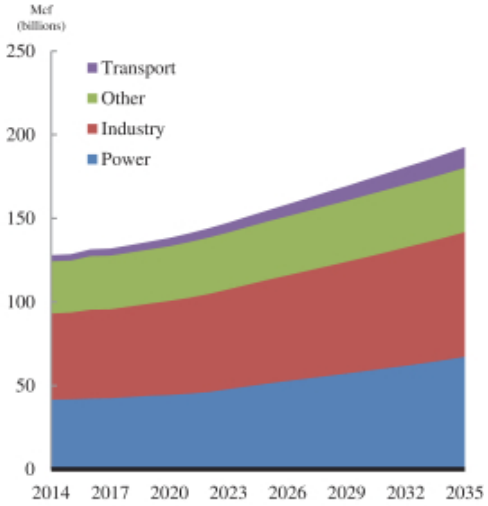
- ***Increasing global demand for crude oil and natural gas.*** We believe the oilfield services industry will benefit from continued increases in the demand for hydrocarbons over time, primarily resulting from increased demand from industrializing nations, including China, India, other Asian countries and the Middle East. Demand growth from these regions is projected to more than offset decreasing demand from Organization for Economic Cooperation and Development nations. In its 2016 Energy Outlook, BP p.l.c. ("BP Energy Outlook") estimates that total oil demand will increase from approximately 92 million barrels of oil per day ("Mb/d") in 2014 to 112 Mb/d by 2035. Over the same period, the U.S. Energy Information Administration estimates that the total demand for natural gas will increase by 1.8% per year, from approximately 128 billion Mcf (calculated in thousand cubic feet per day ("Mcf")) to approximately 192 billion Mcf. The following charts illustrate the projected increases in demand for oil and natural gas from 2014 to 2035:

Global Oil Demand by Region



Source: BP Energy Outlook

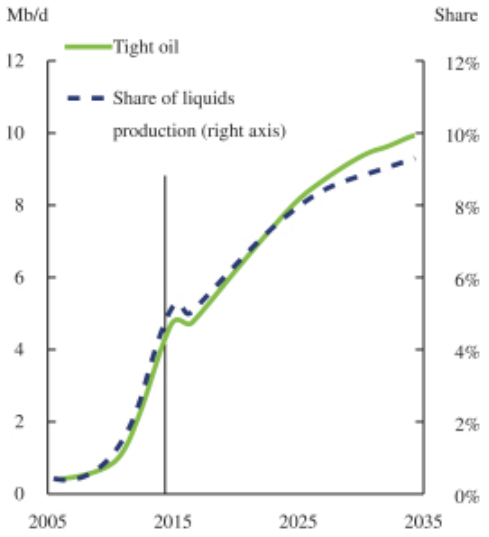
Global Natural Gas Demand by Sector



Source: International Energy Outlook 2016, U.S. Energy Information Administration

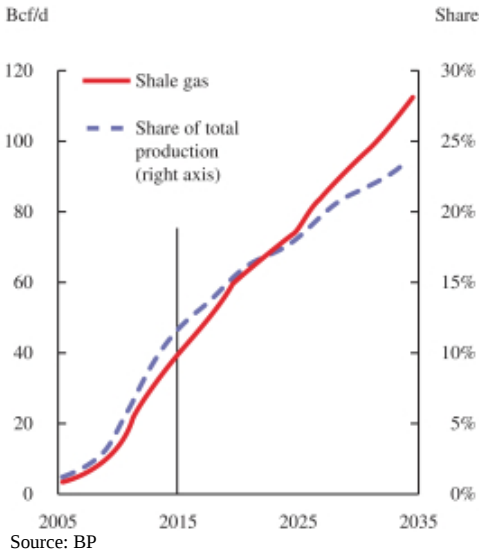
- ***Unconventional formations are becoming a larger part of the overall hydrocarbon production mix.*** Increases in efficiency and the continued development and implementation of new technology have led to significant improvements in the economics of the production of unconventional formations. According to BP Energy Outlook, since 2005, tight oil has increased from less than 1% of overall global oil production to nearly 5% of overall oil production in 2014 and tight oil production growth is projected to outpace growth from all other sources, reaching nearly 10% of all oil production by 2035. The BP Energy Outlook estimates that shale gas production increased from approximately 1% of total global natural gas production in 2005 to nearly 10% of total global natural gas production in 2014 and that shale gas production is projected to continue to grow at 5.6% per year through 2035, and is projected to reach 24% of total natural gas production by 2035. The following charts illustrate the projected increases in production of global tight oil and shale gas from 2014 to 2035:

Global Tight Oil Production and Share



Source: BP Energy Outlook

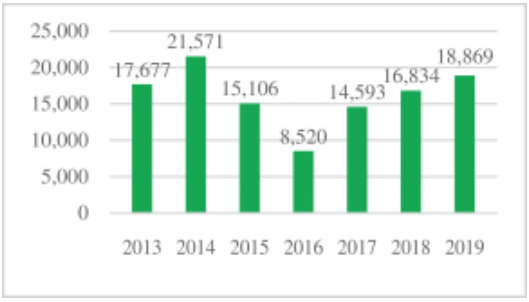
Global Shale Gas Production and Share



Source: BP Energy Outlook

- ***Significant new well completions are required to offset naturally-declining oil and natural gas production.*** Oil and natural gas production from an individual well will generally exhibit its highest production level in the months following its completion, and production will decline over time thereafter. As a result, significant drilling and completion activity is required to offset the production declines from the existing producing well base, with such declines for global oil production estimated at 6% per year by the International Energy Agency in its 2013 World Energy Outlook. Additional drilling above the level needed to offset declines is required to provide the production growth required to meet increasing global demand. Tight oil and shale gas wells typically experience faster production declines during their first few years of production than conventional wells. As a result, as tight oil and shale gas becomes a higher percentage of the global production mix, average decline rates will rise, increasing the amount of drilling and completion activity required to sustain production levels. Spears projects that the number of horizontal wells drilled in North America will increase from 11,702 in 2016 to over 25,600 in 2019, a compound annual growth rate of 29.8%.

U.S. Horizontal Wells by Year

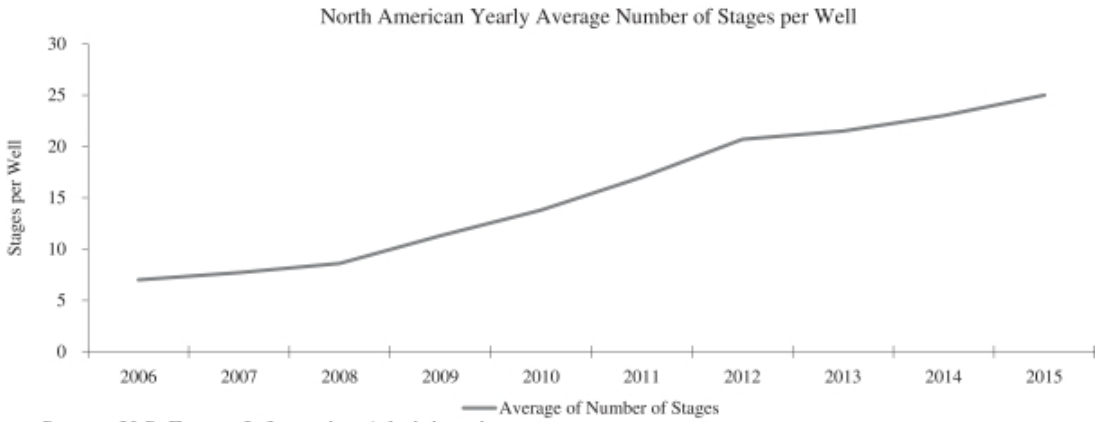


Source: Spears

Canadian Horizontal Wells by Year

Source: Spears

- ***Increasing completion equipment and services requirements per horizontal well.*** Oil and natural gas producers continue to evolve the designs in their completions of horizontal wells targeting unconventional formations. On average, horizontal laterals in wells targeting unconventional formations have been trending longer, the number of completion stages per well has been trending higher and the spacing between stages in a horizontal lateral has been decreasing. In addition, many oil and natural gas producers have been increasing the amount of proppant they are placing into their wellbores on both an aggregate basis and when measured in the amount placed per foot of the horizontal lateral. Based on estimates from the U.S. Energy Information Administration Energy, the average number of stages per horizontal well increased every year from 2006 to 2015 from fewer than 10 in 2006 to approximately 25 in 2015, and we believe this trend will continue. We expect to benefit from this trend, as the number of frac sleeves we sell is likely to increase, corresponding with increases in the average number of stages per well.



Source: U.S. Energy Information Administration

- ***Tighter well spacing and completion of multiple zones within a single productive horizon.*** Oil and natural gas producers have been undertaking well spacing studies to optimize the number of wells they drill and complete on their acreage. In many cases, this results in tighter well spacing. In a similar fashion, oil and natural gas companies are testing well placement strategies in which they can complete wells landed at different vertical depths targeting the same hydrocarbon-bearing formation. Tighter well spacing and placing multiple wells in the same formation can have the result of increasing the inventory of potential wells that can be drilled, completed and brought on production. As individual wellbores are placed in closer proximity to one another, we believe it is important to control the growth of hydraulic fractures to maximize production from each individual well and to minimize the risk of negatively impacting production from the surrounding wells.

- ***Secondary recovery strategies for horizontal wells.*** Wells drilled targeting unconventional formations are estimated to recover a much lower percentage of the original hydrocarbons in place than conventional sources of oil and natural gas. The U.S. Energy Information Administration estimated tight oil recovery factors to range from 3% to 7% on average and shale gas recovery factors to range from 20% to 30%. Oil and natural gas producers are evaluating and implementing strategies to increase the recovery from their existing wells, including through refracturing, waterflood and natural gas flood operations. We believe that our MultiCycle sliding sleeves provide our customers with increased long-term flexibility in pursuing secondary recovery strategies.

BUSINESS

Overview

We are a leading provider of highly engineered products and support services that facilitate the optimization of oil and natural gas well completions and field development strategies. We provide our products and services primarily to E&P companies for use in onshore wells, predominantly wells that have been drilled with horizontal laterals in unconventional oil and natural gas formations. Our products and services are utilized in oil and natural gas basins throughout North America and in selected international markets, including Argentina, China and Russia. We have provided our products and services to over 140 customers in 2016, including leading large independent oil and natural gas companies and major oil companies.

Our primary offering is our Multistage Unlimited family of completion products and services, which enable efficient pinpoint stimulation: the process of individually stimulating each entry point into a formation targeted by an oil or natural gas well. Our Multistage Unlimited products and services are typically utilized in cemented wellbores and enable our customers to precisely place stimulation treatments in a more controlled and repeatable manner as compared with traditional completion techniques. Our Multistage Unlimited products and services operate in conjunction with third-party providers of pressure pumping, coiled tubing and other services.

We began providing pinpoint stimulation products and services in 2006, and since then our technology has been used in the completion of more than 7,600 wells comprising over 155,000 individual frac stages. Our initial focus on the Canadian market has resulted in our products and services being used in 26% of all horizontal wells drilled in Canada in 2016. We began our efforts to increase our penetration of the U.S. market in 2013, and the United States accounted for approximately 23% of our revenue in 2016. We are focused on increasing our market share in the United States, particularly in the Permian Basin. Sales of our products and services in the Permian Basin contributed 56% and 43% of our revenue in the United States in 2016 and 2015, respectively.

Multistage Unlimited includes our casing-installed sliding sleeves and downhole frac isolation assembly. Customers typically purchase our casing-installed sliding sleeves, a consumable product that is cemented at intervals into the casing of the wellbore, and can also utilize services associated with our downhole frac isolation assembly. Our downhole frac isolation assembly is comprised of numerous subcomponents, including a resettable bridge plug for stage isolation, a sleeve locator to efficiently locate our sliding sleeves in the wellbore, an abrasive perforating sub that can perforate the casing where our sliding sleeves are not installed and gauge packages that can measure and record downhole data. Our personnel supervise the use of the downhole frac isolation assembly during completion operations. In addition, our downhole frac isolation assembly provides valuable downhole data, including recorded downhole temperatures and pressures, which can be analyzed and used in designing future completion strategies. Further, because our downhole frac isolation assembly is deployed on coiled tubing, our customers have access to real-time downhole pressure measurements which can be used to adjust strategies during a well completion. We offer two primary models of sliding sleeves: our GripShift sliding sleeves, which open one time, and our MultiCycle sliding sleeves, which can be opened and closed multiple times giving our customers the benefit of additional completion options and the ability to better optimize a well's production phase. We hold 23 patents related to our technology and received the *World Oil* Best Completions Technology Award in 2014 and 2015 for our Multistage Unlimited products and services and MultiCycle sliding sleeves, respectively.

We complement our proprietary products and services with our in-house expertise in completions engineering, reservoir engineering and geology. These capabilities allow us to engage with our customers on well completion design and well spacing decisions, thereby supporting our customers' completion optimization strategies and building lasting relationships. In addition, our extensive research and development efforts are influenced and driven by the needs of our customers, allowing us to introduce innovative and commercial solutions that improve customer efficiency and profitability.

Our revenue for the years ended December 31, 2016 and 2015, was $98.5 million and $114.0 million, respectively. Our net income (loss) for the years ended December 31, 2016 and 2015, was $(17.9) million and

$28.0 million, respectively. Our Adjusted EBITDA for the years ended December 31, 2016 and 2015 was $13.9 million and $26.2 million, respectively. For the definition of Adjusted EBITDA and a reconciliation to its most directly comparable financial measure calculated and presented in accordance with GAAP, please read “Summary Historical Consolidated Financial and Other Data.”

Competitive Strengths

We believe we are well positioned to achieve our business objectives based on the following competitive strengths:

- ***Patented and differentiated completions technology.*** Our value proposition is built on a foundation of patent-protected technology and industry leading technical capabilities. Our Multistage Unlimited products and services are designed to provide our customers with an enhanced degree of precision for more predictable, repeatable and verifiable well completions, in order to maximize reservoir connectivity while minimizing the impact of the completion on the productivity of offsetting wells. Our technology also provides E&P companies access to accurate real-time and recorded downhole information which can enhance completion and well spacing optimization strategies. This information is typically not available with traditional completion techniques. We believe that the benefits provided by our proprietary technology and our operating experience and know-how differentiate us from providers of traditional completion technologies, including plug and perf and ball drop, and from other pinpoint stimulation competitors.
- ***Proven record of successfully introducing new technologies that drive completion and production optimization.*** Our research and development efforts are targeted to solve customer challenges and provide solutions that improve customer efficiency and profitability. Our in-house and field engineering teams are responsible for developing new technology to expand our product and service offerings and enhance the performance of our existing products. During the recent commodity price downturn, we accelerated our investment in these efforts, adding to our pipeline for future product and service introductions. We believe we are a leader in the development of new completions technology, which is reflected in our extensive and growing suite of patent-protected products and methods. We hold 9 U.S. patents and 14 related international patents and have 40 U.S. patent applications pending and 51 related international patents pending. We received the *World Oil* Best Completions Technology Award in 2014 and 2015 for our Multistage Unlimited products and services and MultiCycle sliding sleeves, respectively. We believe our engineering expertise, combined with our focus on completions technology, gives us a competitive advantage in designing and commercializing new completions technology. For example, we introduced our AirLock casing buoyancy system in late 2013 and this system has been utilized in over 1,650 wells since its introduction. The AirLock continues to increase its market penetration, with 50% more AirLocks sold in 2016 as compared to 2015, a time period in which the total number of horizontal wells drilled in the U.S. and Canada declined on a year-over-year basis.
- ***Market leader in pinpoint stimulation.*** We believe we are a global leader in pinpoint stimulation products and services, based on the number of wells completed using our technology and the number of stages in the wells completed using our technology. Since our founding, our products and services have been utilized by our customers for the pinpoint completion of over 7,600 wells, resulting in the placement of over 155,000 frac stages. Our experience as a leader in pinpoint stimulation has given us the opportunity to gain valuable operational insights into the use of this stimulation technique. We have used these insights to continually improve upon our existing products and to develop new products. Our products and services have been utilized in all major unconventional oil and natural gas basins in North America and in selected global markets. Our leadership in pinpoint stimulation has led to the use of our products and services in a number of wells that include what we believe to be the highest number of stages in the following basins: 147 stages in a well in the Permian Basin, 116 stages in a well in the Marcellus shale, 134 stages in a well in the Montney, 123 stages in a well in the Duvernay, 106 stages in a well in the Cardium, 60 stages in a well in the Vaca Muerta region in Argentina and 30 stages in a well in the Khantos region in Russia.

- ***Asset-light business model and strong balance sheet provide significant flexibility.*** Throughout the commodity price downturn, we have maintained attractive margins, which we believe validates our value proposition to our customers and reflects our ability to quickly adjust our cost structure. Our Adjusted EBITDA as a percentage of revenue was 14%, 23%, 43% and 46% for the years ended December 31, 2016, 2015, 2014 and 2013, respectively. Because our business is not capital intensive, we are able to generate significant free cash flow through business cycles, with free cash flow as a percentage of revenue of 9%, 3%, 18% and 8% for the years ended December 31, 2016, 2015, 2014 and 2013, respectively. However, we had a net loss of approximately $17.9 million for the year ended December 31, 2016, which was primarily due to the effects of the commodity price downturn. By focusing on downhole completion equipment and services, and not high-cost assets deployed on the surface, such as coiled tubing or pressure pumping, our net P&E as of December 31, 2016 was $9.8 million. Sales of our products, which are consumable items, represented approximately 74% and 70% of our revenue for the years ended December 31, 2016 and 2015, respectively. We believe we have a strong balance sheet and ample liquidity to pursue our growth initiatives. At the closing of this offering, we expect to have no or minimal debt outstanding and $72.3 million in liquidity from cash on hand and $50.0 million of available borrowing capacity under our New Senior Secured Credit Facility that we expect to enter into concurrently with the closing of this offering.
- ***Trusted advisor to a leading customer base.*** We have leveraged our extensive experience and differentiated products and services to establish strong relationships with our customers. For the last eight years, we have been the preferred completion technology provider to Crescent Point, our largest customer and one of Canada's largest independent E&P companies. Our technology has been vetted and chosen by some of the largest, most sophisticated energy companies in the world, resulting in a customer base that includes more than 140 customers globally, including national, major and large independent oil companies, such as Apache Corporation, Crescent Point Energy Corp., Devon Energy Corporation, Gazprom Neft PJSC, Range Resources Corporation and Royal Dutch Shell plc. We established ATRS, a team of engineering consultants, in 2015 as a complement to our products and services to provide in-house expertise to assist our customers in optimizing their completion designs and development plans and to evaluate well performance. We believe our ATRS group has deepened our relationships with existing customers, helped us add new customers and effectively demonstrated the value proposition of our pinpoint stimulation offerings. In addition, several of our customers have worked with us to develop new completion technology for specific applications, highlighting their trust in our product development capabilities and adding to our pipeline of technologies available to all of our customers.
- ***Experienced, entrepreneurial management team with strong culture of innovation.*** Our management team, led by co-founders, CEO, Robert Nipper, and President, Marty Stromquist, provides disciplined strategic direction and insight gained from multi-decade careers in the energy technology and oilfield service industries. Our founders, pioneers in pinpoint stimulation, led our company through a period of exceptional growth and provide the keystone for our culture. Our culture is defined by "The Promise," a document that guides our relationships with our employees, customers, vendors and other stakeholders and affirms our commitment to quality and safety. We maintain our culture through the ongoing coaching of our employees and continuously measure ourselves to identify areas for improvement. Together, Mr. Nipper and Mr. Stromquist, have assembled a management team with extensive backgrounds in research and development, manufacturing, operations and finance, with an average of over 25 years of industry and otherwise relevant experience.

Our Business Strategy

Our primary business objectives are to increase the adoption of our products and services in all geographies, continue to be an innovator of technology and create value for our stockholders. We intend to achieve these objectives through the execution of the following strategies:

- ***Focus on expansion in the United States while pursuing disciplined organic growth globally.*** We plan to continue to grow our business in all geographies in which we operate, with our current emphasis on

profitably expanding our presence in the United States. We increased our efforts to target the U.S. market in 2013 and believe we can increase our share in all basins in the United States as our customers focus on optimizing completion designs in an effort to increase overall hydrocarbon recovery and improve financial returns from their assets. In 2016 the United States accounted for approximately 23% of our revenue. We continue to focus on growing our presence in the Permian Basin, the most active basin in the United States, which accounted for 56% of our revenue in the United States during the year ended December 31, 2016. During 2016, we expanded into a larger operational facility in Midland, Texas and directed additional sales efforts to customers operating in the Permian Basin. Outside of the United States, we plan to increase our market position in several deep basin plays in Canada, including the Montney formation, where we currently have lower, but growing, market shares relative to other regions in Canada. We also plan to increase our market position in Argentina, China, and Russia, regions where we have successful operations and which have significant unconventional resource development potential.

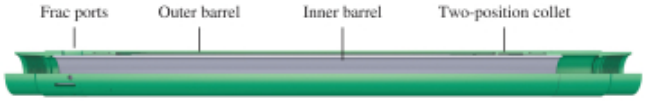
- ***Develop and introduce innovative technologies that are aligned with customer needs.*** Our team of over 30 engineers and engineering technicians works closely with our technical services organization and our customers to identify specific product and service needs, develop business cases and bring new technology to market on an expedited basis. Collaborating with our customers allows us to identify unaddressed industry-wide needs and to develop new technologies, of which we have several under development. By introducing new technologies, we expand our product and service portfolio, grow our customer base and leverage our current customer relationships to generate additional revenue. We believe we have established strong working relationships with our customers, and we are collaborating with several of our customers on solutions for specific onshore and offshore completions needs, with NCS retaining the rights to the intellectual property derived from these projects. We expect to continue to work with our customers on specific solutions to supplement our in-house technology development efforts.
- ***Leverage technology leadership to grow market share.*** Our extensive experience, differentiated offerings and focus on responding to evolving customer needs has allowed us to establish strong relationships with our customers. Over the years we have added in-house capabilities that provide additional value-added expertise and services to our customers, including completions engineering and ATRS. We believe that by focusing on customer service, while continuing to introduce innovative completions solutions, we can strengthen our relationships with existing customers, grow our customer base and increase our revenues. We believe the benefits provided by our technology and our expertise position us to continue to increase our penetration of large independent and major oil companies. We believe these customers are typically more consistent in their capital budgeting, operate in multiple geographies and in many cases are focused on evaluating and deploying technology that can improve well performance. We believe that our ability to pair our in-house expertise, together with the data that is available through our Multistage Unlimited products and services have been key factors enabling us to increase our business with these customers, which represented 45% of our revenue for the year ended December 31, 2016, as compared with 47% and 37% for the years ended December 31, 2015 and 2014, respectively.
- ***Maintain financial strength and flexibility.*** We expect to continue to employ a disciplined financial policy that maintains our financial strength and flexibility. We have maintained our financial flexibility by taking actions designed to preserve positive cash flows, minimize capital expenditures and reduce debt levels. We believe our resulting financial strength and flexibility provides us with the ability to execute our strategy through industry volatility and commodity price cycles, as evidenced by our performance throughout the recent commodity price downturn. For example, during the downturn we were able to leverage our supply chain through initiatives to reduce the number of vendors in our manufacturing operations, as well as reduce our manufacturing costs for certain products by over 30%, which has supported our gross margin. We believe that our cash on hand, expected borrowing capacity and ability to access debt and equity capital markets after this offering, combined with our ability to generate free cash flow, will provide the financial flexibility required to execute our growth strategies.

- ***Selectively pursue complementary acquisitions and joint ventures.*** We believe there is an opportunity to enhance our existing product and service capabilities and geographic scope by selectively pursuing acquisitions and joint ventures. We intend to target strategic acquisitions that will enhance our market position and provide opportunities for synergies. We believe that being a public company will allow us to target a broader range of acquisition candidates.

Our Products and Services

We provide products and services that enable pinpoint stimulation: the process of individually stimulating each entry point into a formation targeted by an oil or natural gas well. We believe that our products and services improve on traditional completion techniques. Our solutions and refined field processes are designed to enable efficient, controlled, verifiable and repeatable completions. We complement our multistage completion products and services with other efficiency-enhancing completions technologies and our multi-disciplinary engineering capabilities. Our key products and services include:

- ***Multistage Unlimited.*** Our Multistage Unlimited family of products and services encompasses our technology developed to enable efficient pinpoint stimulation and re-stimulation strategies. This suite of products is comprised of our casing-installed sliding sleeves and our downhole frac isolation assemblies, which are deployed using coiled tubing. Our services include advising customers on optimizing completion designs and operating the downhole frac isolation assemblies.
  - ***Casing-installed sliding sleeves.*** Our casing-installed sliding sleeves are a consumable product, sold to our customers and cemented in place in a well's casing. Over 112,000 of our casing-installed sliding sleeves have been installed, including over 30,000 of our MultiCycle sliding sleeves. We produce two primary models of sliding sleeves: our GripShift sliding sleeves, which can be opened only once, and our MultiCycle sliding sleeves, introduced in late 2013, which can be opened and closed multiple times throughout the life of a well. The image below illustrates one of our MultiCycle sliding sleeves. During completion operations, the downhole frac isolation assembly is placed in the sleeve and the inner barrel of the sleeve is shifted down, exposing the frac ports to the formation, allowing the completion of that stage to begin.



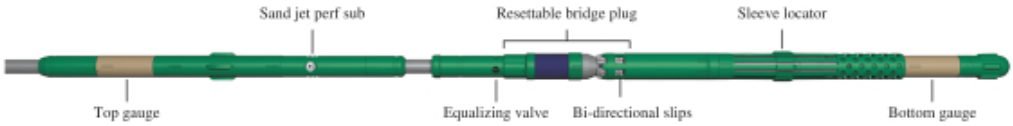
Key features of both primary models of our sliding sleeves include:

- no practical limitation on the number of stages in a well;
- a full-drift inner-diameter that is the same as the wellbore's casing, with no plugs or ball seats to mill or drill out;
- designed for use in cemented or open-hole wellbores; and
- a cumulative sleeve shifting success rate of over 99%.

Additionally, our MultiCycle sliding sleeves provide the ability to:

- close the sleeves immediately following the completion of a stage to mitigate proppant flowback, enhancing conductivity and reducing the need for post-completion well cleanouts;
- close off zones producing high levels of water or unwanted natural gas;
- execute high rate, pinpoint refracturing strategies; and
- support the conversion of a producing well to an injector well for EOR strategies, including floods and pressure maintenance.

- ***Downhole frac isolation assembly.*** Our proprietary downhole frac isolation assembly is comprised of several subcomponents. The assembly is primarily used to locate our sliding sleeves, to establish wellbore isolation and to shift our sliding sleeves open or closed. We typically own the assemblies and utilize them in our service to our customers. Our personnel operate the assemblies during completion operations in coordination with other on-site service providers. The image below illustrates a downhole frac isolation assembly designed for use with our MultiCycle sliding sleeves.



  Key features of our downhole frac isolation assembly include:

  - a resettable bridge plug enabling the completion of all stages in a well without having to remove the assembly from the wellbore;
  - an abrasive perforating subassembly, which can be utilized to add stages to a well with sliding sleeves installed or as the method to establish formation access in wells not utilizing our sleeves;
  - gauge packages located above and below the resettable bridge plug that record pressure and temperature data;
  - benefits associated with having coiled tubing in the wellbore, including real-time bottom-hole pressure measurements, the ability to circulate fluids to the stage being completed and the ability to mitigate screenouts; and
  - a range of configurations allowing a variety of pinpoint stimulation and refracturing strategies.

- ***Sand jet perforating.*** Our sand jet perforating technology uses a variation of the downhole frac isolation assembly utilized for shifting sleeves. Sand jet perforating is typically used with cemented wellbores. To cut access points into the formation, sand-laden fluid is pumped down the coiled tubing and through tungsten-carbide nozzles. The high-velocity slurry cuts through the casing and cement and into the formation. The tunnels created through this process serve as initiation points for stimulation. Stimulation treatments are pumped down the annulus between the coiled tubing and the casing. Although the sand jet perforating process requires more time per stage than using Multistage Unlimited sliding-sleeves, it provides a practical option for pinpoint stimulation in wells that are already cased, as in the case of drilled, but uncompleted wells ("DUCs").
- ***SpotFrac system.*** Our SpotFrac system provides a means to straddle and mechanically isolate producing zones for targeted refracturing applications. The system includes an sand jet perforating assembly, enabling additional stages to be added if desired, and can perforate, isolate and stimulate multiple stages in a single trip.
- ***BallShift sleeves.*** Our BallShift sliding sleeves can be cemented in place and are activated by pumping a ball from surface that lands on seats in the sleeves, providing pinpoint stimulation. In some instances the BallShift sleeves will be utilized together with our coiled-tubing deployed technology in a hybrid application to increase the amount of stages that can be run in extended reach applications, with the BallShift sleeves installed at the toe of such wells.

Multistage Unlimited Operations Overview—Well with Casing-Installed Sliding Sleeves

When it is time to complete a well using our downhole frac isolation assembly, one of our field service supervisors at the wellsite coordinates operations with the customer and the other service providers, including the coiled tubing, pressure pumping and flowback providers. After a flow path is initiated at the toe of the well, our downhole frac isolation assembly is run to the toe of the well on coiled tubing and then is slowly pulled upwards.

When the sleeve locator assembly latches into the frac sleeve, a force signal is detected at the surface, indicating that the assembly is positioned in the sleeve. The downhole assembly is then cycled to engage its slips onto the inner barrel of the sleeve and to compress the resettable bridge plug to provide isolation. Once isolation is established, a combination of force applied from surface on the coiled tubing and hydraulic force applied to the bridge plug from fluid being pumped into the wellbore create sufficient force to shift the sleeve into the open position, locking it in place and exposing the frac ports, enabling access to the formation. The stimulation process is then initiated. At the end of the stage, the coiled tubing unit is engaged to activate the equalizing valve, which in turn decompresses the resettable bridge plug and disengages the slips. The downhole frac isolation assembly is then pulled upward until the next sleeve is located and the process is repeated until the last stage has been completed, at which point the downhole frac isolation assembly is pulled out of the hole. In most cases, the fluid and proppant used for stimulation are pumped down the annulus between the casing and the coiled tubing that is in the wellbore. When pumping at lower rates or in areas where control of the frac dimensions is essential, the stimulation in treatment is pumped through the coiled tubing itself. The gauges installed above and below the resettable bridge plug on our downhole frac isolation assembly record pressure and temperature throughout the completion operation.

Our frac engineers, technical services team, salespeople, field service supervisors and, in some instances, ATRS are involved throughout the planning, execution and evaluation of each completion utilizing our Multistage Unlimited technology. The table below illustrates the role we can play at each stage of a typical well completion:

Pre-Job	• Collaborate with customer on well objectives and key performance indicators • Review completion program with customer to optimize design - Torque and drag models - Coiled tubing force analysis - Economic modelling of stage spacing, sleeve placement and completion design
Installation	• Supervise casing-running to confirm specifications are followed
Job Execution	• Prepare job procedures for the completion • Lead pre-job meeting with customer and other services providers (pressure pumping, coiled tubing, flowback, others) - Discuss location layout, logistics, communication protocol, screen-out procedures and contingency processes • On-site pre-job meeting to confirm all service providers are coordinated and understand roles and responsibilities • Confirm all pre-job procedures are completed • Assemble and test assemblies and gauges on surface, run tools into the well - Correlate depths with coiled tubing and drilling tally - Test assembly and wellbore integrity • Locate first sleeve at toe of the well - Establish isolation, shift sleeve and pump stage - Unset and move to the next stage; repeat - Pressure test assembly and wellbore at each stage • Pull out of hole, inspect assemblies and download gauge data

Post-Job Review

- Collect data from pressure pumping and coiled tubing service providers to pair with NCS gauge data
- Post-job meeting
  - Review performance relative to key performance indicators
  - Detailed review of gauge, coil and other data
  - Provide recommendations for optimization of operations and/or job design for future wells (frac design, fluid design, cementing practices and sleeve placement)
- After three months or more of production, ATRS can review well production and pressure data to perform rate transient analysis and economic modelling
  - Further input on potential impacts of changes to completion design, sleeve placement, stage spacing and well spacing

Additional Products and Services

In addition to our Multistage Unlimited family of multistage completion products and services, we offer several other products and services that can be used on their own or in conjunction with our system.

- ***Anderson Thompson Reservoir Strategies (ATRS).*** Our specialized team of engineering consultants advises customers on optimized completion designs and field development strategies and evaluates well performance. ATRS helps us strengthen our relationships with our customers and has been effective at demonstrating the benefits of our Multistage Unlimited system as compared to traditional completion techniques.
- ***AirLock casing buoyancy system.*** Our AirLock casing buoyancy system facilitates landing casing strings in horizontal wells without altering a customer's preferred casing and cementing operations. The AirLock, which is installed with a well's casing, allows the vertical casing section to be filled with fluid, while the lateral section remains air-filled and buoyant. The enhanced buoyancy significantly reduces sliding friction, while the enhanced weight of the vertical section provides the force needed to push the casing to the toe of the well, ensuring the casing reaches the desired depth and reducing casing running time and cost. Our AirLock system consists of two components that are made up in the casing string during run-in: a debris-trap and a seal collar. The debris-trap is installed in a casing connection just above the float shoe and the seal collar is installed at the bottom-most point of the vertical portion of the wellbore. The seal collar contains a breakable seal that locks air in the lower section of casing while the upper section is run and filled with fluid. After the casing is landed, surface pressure is increased to fragment the seal at a predetermined pressure, leaving an unrestricted casing bore, while seal fragments are collected by the debris trap, facilitating cementing operations.
- ***Liner hanger systems.*** Introduced in late 2014, our proprietary Vector Max and Vector-1 liner hanger systems are specifically designed to perform in complex horizontal wells and are fully compatible with our Multistage Unlimited products. The liner hanger is used to distribute the loads and weight of the liner to the supporting casing.

Intellectual Property and Patent Protection

We have dedicated resources toward the development of new technology and products designed to enhance the safety and efficiency of well completions processes. Our sales and earnings are influenced by our ability to successfully introduce new or improved products to the market. Our MultiCycle sliding sleeves, downhole frac isolation assembly and other equipment involve a high degree of proprietary technology developed over several years, some of which is protected by patents.

We hold 9 U.S. patents and 14 related international patents that relate to the design features of our casing-installed sliding sleeves and frac isolation assembly and the methods utilized in the provision of our services. Our U.S. patents expire between 2030 and 2033. Our international patents expire between 2024 and 2032.

We have 40 U.S. patent applications pending and 51 related international patents pending. A portion of the patent applications cover our existing multistage completions products and services, our AirLock technology and equipment and methods which are currently in development. The applications are in various stages of the patent prosecution process and patents may not issue on such applications in any jurisdiction for some time, if they issue at all.

We believe that our patents have historically been important in enabling us to compete in the market to supply our customers with our products and services. We intend to enforce, and have in the past vigorously enforced, our patents. We may from time to time in the future be involved in litigation to determine the enforceability, scope and validity of our patent rights. In addition to patent rights, we use a significant amount of trade secrets, or "know-how," and other proprietary information and technology. None of this "know-how" and technology is licensed from third parties.

Although in the aggregate our patents are very important to us, we do not regard any single patent or group of related patents as critical or essential to our business as a whole. In general, we depend on our operational capabilities and the application of know-how together with our patented technology in the conduct of our operations. We also consider the quality and timely delivery of our products, the services we provide to our customers and the technical knowledge and skill of our personnel to be highly important to our ability to compete.

Research and Development

We are engaged in research and development activities focused on the design, development, trialing and commercialization of innovative completions technologies and the improvement of existing products and services. For the years ended December 31, 2016 and 2015, we incurred approximately $3.3 million and $3.0 million, respectively, of research and development expense. In 2016, research and development expense was approximately 3.4% of consolidated revenue and 8.9% of our total selling, general and administrative expense. We expect that our 2017 research and development investment will increase in anticipation of the growth of our business.

Customers

Our customer base primarily consists of oil and natural gas producers in North America and in certain international markets as well as oilfield service companies.

For the years ended December 31, 2016 and 2015, we had over 140 and 150 customers, respectively. Our top five customers accounted for approximately 49% and 44% of our revenue for the years ended December 31, 2016 and 2015, respectively. Crescent Point accounted for 26% and 31% of our revenue during the years ended December 31, 2016 and 2015, respectively. No other customer accounted for more than 10% of our revenue in either period.

Although we believe we have a broad customer base and wide geographic coverage of operations, the loss of one or more of our significant customers could have a material adverse effect on our results of operations.

Sales and Marketing

Our sales and marketing activities are performed through a technically-trained direct sales force, which consisted of 21 employees as of December 31, 2016. We recognize the importance of a technical marketing

program in demonstrating the advantages of new technologies that offer benefits relative to established industry methodologies. Our technical sales force advises customers on the benefits of pinpoint stimulation, MultiCycle sliding sleeves and our technical engineering resources.

Most of our sales are on a just-in-time basis, as specified in individual purchase orders, with a fixed price for our sleeves and agreed rates for the onsite services we provide. We occasionally supply our customers with large orders that may be filled on negotiated terms appropriate to the order. Although we do not typically maintain supply or service contracts with our customers, a significant portion of our sales represent repeat business.

International sales are typically made to our local operating partners on a free on board basis with a point of sale in the United States. Some of the locations in which we have operating partners or sales representatives include Argentina, China, Russia and the Middle East. Our operating partners and representatives do not have do not have authority to contractually bind our company, but market our products in their respective territories as part of their product or service offering.

Sales of our Multistage Unlimited products and services and ATRS services are made directly to E&P companies. Our customers also hire the coiled tubing companies and pressure pumping services companies that work alongside us during the completion of a well. We provide our AirLock and liner hanger products directly to E&P companies as well as to oilfield services companies that act as distributors for that product line.

The primary factors influencing a customer’s decision to purchase our products and services are technology, service quality, safety track record and price.

We provide extensive support services and have developed proprietary methodologies for assessing and reporting the information that is collected on our downhole gauges. In addition, ATRS works with customers to evaluate post-completion well performance and on a pre-job basis to simulate the production and economic outcomes from pinpoint stimulation strategies relative to traditional completion techniques. We also provide technical education to the coiled tubing services companies and pressure pumping services companies, explaining the benefits of utilizing our technology for their operations and our customers.

In addition to the technical marketing effort, we occasionally engage in field trials to demonstrate the economic benefits of our products and services. Periodically, we will provide ATRS services to E&P companies on a discounted basis, in exchange for their agreement to provide production data for direct comparison of the results of pinpoint stimulation to traditional completion techniques.

We operate with most of our customers under MSAs. We endeavor to allocate potential liabilities and risks between the parties in the MSAs. Generally, under our MSAs, we assume responsibility for, including control and removal of, pollution or contamination which originates above surface and originates from our equipment or services. Our customer assumes responsibility for, including control and removal of, all other pollution or contamination which may occur during operations, including that which may result from seepage or any other uncontrolled flow of drilling fluids.

Seasonality

A substantial portion of our business is subject to quarterly variability. In Canada, we typically experience higher activity levels in the first quarter and fourth quarter of each year, as our customers take advantage of the winter freeze to gain access to remote drilling and production areas. In the past, our revenue in Canada has declined during the second quarter due to warming weather conditions that result in thawing, softer ground, difficulty accessing drill sites and road bans that curtail drilling and completion activity. Access to well sites typically improves throughout the third quarter in Canada, leading to activity levels that are higher than in the second quarter, but lower than activity in the first and fourth quarters. Our business can also be impacted by a reduction in customer activity during the winter holidays in late December and early January.

Suppliers and Raw Materials

We acquire component parts and raw materials from suppliers, including machine shops. The prices we pay for our raw materials may be affected by, among other things, energy, steel and other commodity prices, tariffs and duties on imported materials and foreign currency exchange rates. Most of the raw materials we use in our manufacturing operations, such as steel in various forms, electronic components and elastomers, are available from many sources.

We generally try to purchase our raw materials from multiple suppliers so we are not dependent on any one supplier. We will generally utilize multiple machine shops for the manufacturing of our component parts so that we are not dependent on any one machine shop. Our suppliers are also active in multiple regions which allows us to react to changes in foreign currency exchange rates. In recent months, we have added suppliers to increase third-party component part supply in order to meet expected demand growth. In addition, we recently entered into a joint venture which we believe will allow us to reduce our costs for certain product categories.

Properties

Our corporate headquarters are located at 19450 State Highway 249, Suite 200, Houston, Texas 77070. We currently own one property, located in Calgary, Alberta, which is used for our engineering and research and development activities. In addition to our property in Calgary, Alberta, we also lease 15 properties that are used for our corporate headquarters, sales offices, manufacturing, engineering, district operations, warehousing and storage yards. All of these properties are leased from third parties. We believe that these facilities are adequate for our current operations and that none of our leases are individually material to our business.

Operating Risks and Insurance

We currently carry a variety of insurance for our operations. Although we believe we currently maintain insurance coverage adequate for the risks involved, there is a risk our insurance may not be sufficient to cover any particular loss or that our insurance may not cover all losses.

Competition

The markets in which we operate are highly competitive. To be successful, we must provide services and products that meet the specific needs of E&P companies at competitive prices. We compete in all areas of our operations with a number of companies, some of which have financial and other resources greater than or comparable to ours.

We believe that we compete not only against other providers of pinpoint stimulation equipment and services, but also with companies that support the other primary means of hydraulically fracturing a horizontal well, including plug and perf and ball drop completions.

Our major competitors for our completion products and services include Schlumberger Limited, Halliburton Company, Baker Hughes Incorporated, Weatherford International Ltd, Packers Plus Energy Services, Nine Energy Service Inc., and Superior Energy Services Inc. as well as a number of smaller or regional competitors.

We believe that the most significant factors influencing our customer’s decision to utilize our equipment and services are technology, service quality, safety track record and price. While we must be competitive in our pricing, we believe our customers select our products and services based on the technical attributes of our products and equipment, the level of technical and operational service we provide before, during and after the job, and the know-how derived from our extensive operational track record. We believe that our technology and technical capabilities have enabled us to increase the overall market penetration for pinpoint stimulation solutions.

Environmental and Occupational Health and Safety Matters

We are subject to stringent and complex federal, state, provincial and local laws and regulations governing the discharge of materials into the environment or otherwise relating to protection of worker health, safety and the environment. Compliance with these laws and regulations may require the acquisition of permits to conduct regulated activities, capital expenditures to prevent, limit or address emissions and discharges, and stringent practices to handle, recycle and dispose of certain wastes. Failure to comply with these laws and regulations may result in the assessment of administrative, civil and criminal penalties, the imposition of remedial or corrective obligations, and the issuance of injunctive relief.

We believe that we are in substantial compliance with applicable environmental, health and safety laws and regulations. Further, we do not anticipate that compliance with existing environmental, health and safety laws and regulations will have a material effect on our consolidated financial statements. However, laws and regulations protecting the environment generally have become more stringent in recent years and are expected to continue to do so. It is possible, that substantial costs for compliance with applicable environmental, health and safety laws and regulations may be incurred in the future. Moreover, it is possible that other developments, such as the adoption of stricter environmental laws, regulations, and enforcement policies, could result in additional costs or liabilities that we cannot currently quantify.

While we do not anticipate that compliance with existing environmental, health and safety laws and regulations will have a direct adverse effect on our operations, our customers are subject to a wide range of such laws and regulations, which could materially and adversely affect their businesses and indirectly, through reduced demand for our products and services, have a material adverse effect on our business, financial condition and results of operations, including with respect to the following:

- ***Air Emissions.*** The Federal Clean Air Act (the "CAA") and comparable state laws regulate emissions of various air pollutants through air emissions permitting programs and the imposition of other emission control requirements. In addition, the EPA has developed, and continues to develop, stringent regulations governing emissions of toxic air pollutants at specified sources. Non-compliance with air permits or other requirements of the CAA and associated state laws and regulations can result in the imposition of administrative, civil and criminal penalties, as well as the issuance of orders or injunctions limiting or prohibiting non-compliant operations.
- ***Water discharges***. The federal Clean Water Act ("CWA"), and analogous state laws impose restrictions and strict controls with respect to the discharge of pollutants, including spills and leaks of oil and other substances, into state waters or waters of the United States. The discharge of pollutants into regulated waters is prohibited, except in accordance with the terms of a permit issued by the EPA or an analogous state agency. Federal and state regulatory agencies can impose administrative, civil and criminal penalties as well as other enforcement mechanisms for non-compliance with discharge permits or other requirements of the CWA and analogous state laws and regulations.
- ***Climate Change.*** Our customers are or may become subject to statutes or regulations aiming to reduce emissions of GHGs. In December 2009, the EPA determined that emissions of carbon dioxide, methane and other GHGs present an endangerment to public health and the environment because emissions of such gases are, according to the EPA, contributing to warming of the earth's atmosphere and other climatic changes. Based on these findings, the EPA has begun adopting and implementing regulations to restrict emissions of GHGs under existing provisions of the CAA. For example, in June 2016, the U.S. EPA published final rules under the CAA that establish new and more stringent emission control standards for methane and VOCs released from new and modified oil and natural gas development and production operations. These rules currently are being challenged in court by a number of states, and depending on the outcome of such litigation, the rules could have an adverse effect on our customers and result in an indirect material adverse effect on our business. In addition, the United States and Canada are among almost 200 nations that, in December 2015, agreed to the Paris Agreement, an international climate change agreement that calls for countries to set their own GHG emissions targets and be transparent about

the measures each country will use to achieve its GHG emissions targets. The agreement entered into force on November 4, 2016. Although it is not possible at this time to predict how any legal requirements imposed following the implementation of the Paris Agreement that may be adopted or issued to address GHG emissions would impact our business or that of our customers, any such future laws, regulations or legal requirements imposing reporting or permitting obligations on, or limiting emissions of GHGs from, oil and natural gas exploration activities could require our customers to incur costs to reduce emissions of GHGs associated with their operations. In addition, substantial limitations on GHG emissions could adversely affect demand for the oil and natural gas our customers produce.

- ***Non-Hazardous and Hazardous Wastes.*** The Resource Conservation and Recovery Act ("RCRA") and comparable state laws control the management and disposal of hazardous and non-hazardous waste. These laws and regulations govern the generation, storage, treatment, transfer and disposal of wastes that our customers generate. Drilling fluids, produced waters, and most of the other wastes associated with the exploration, development, and production of oil or natural gas, if properly handled, are currently exempt from regulation as hazardous waste under RCRA and, instead, are regulated under RCRA's less stringent non-hazardous waste provisions, state laws or other federal laws. It is possible, however, that certain oil and natural gas drilling and production wastes now classified as non-hazardous could be classified as hazardous wastes in the future. For example, in May 2016, several non-governmental environmental groups filed suit against the EPA in the U.S. District Court for the District of Columbia for failing to timely assess its RCRA Subtitle D criteria regulations for oil and natural gas wastes, asserting that the agency is required to review its Subtitle D regulations every three years but has not conducted an assessment on those oil and natural gas waste regulations since July 1988. A loss of the RCRA exclusion for drilling fluids, produced waters and related wastes could result in an increase in our customers' costs to manage and dispose of generated wastes and a corresponding decrease in their drilling operations, which developments could have a material adverse effect on our business.

The Comprehensive Environmental Response, Compensation, and Liability Act, and comparable state laws, impose joint and several liability, without regard to fault or legality of conduct, on classes of persons who are considered to be responsible for the release of a hazardous substance into the environment. These persons include the owner or operator of the site where the release occurred, and anyone who disposed or arranged for the disposal of a hazardous substance released at the site. In addition, it is not uncommon for neighboring landowners and other third-parties to file claims for personal injury and property damage allegedly caused by hazardous substances released into the environment.

The oil and natural gas industry is extensively regulated by numerous federal, state and local authorities. Legislation affecting the oil and natural gas industry is under constant review for amendment or expansion, frequently increasing the regulatory burden. Also, numerous departments and agencies, at the federal, state and local level, are authorized to issue rules and regulations that are binding on the oil and natural gas industry and its individual members, some of which carry substantial penalties for failure to comply. Although changes to the regulatory burden on the oil and natural gas industry could affect the demand for our services, we would not expect to be affected any differently or to any greater or lesser extent than other companies in the industry with similar operations.

Our customers' operations are subject to various types of regulation at the federal, state and local level. These types of regulation include requiring permits for the drilling of wells, drilling bonds and reports concerning operations. The effect of these regulations may be to limit or increase the cost of oil and natural gas exploration and production, which could have a material adverse effect on our customers and indirectly materially and adversely affect our business.

We supply equipment and services to customers in the oil and natural gas industry conducting hydraulic fracturing operations. Although we do not directly engage in hydraulic fracturing activities, our customers purchase our products and services for use in their hydraulic fracturing activities. Hydraulic fracturing is

typically regulated by state oil and natural gas commissions and similar agencies. Some states have adopted, and other states are considering adopting, regulations that could impose new or more stringent permitting, disclosure or well construction requirements on hydraulic fracturing operations. States could also elect to prohibit high volume hydraulic fracturing altogether, following the approach taken by the State of New York in 2015. Aside from state laws, local land use restrictions may restrict drilling in general or hydraulic fracturing in particular. Municipalities may adopt local ordinances attempting to prohibit hydraulic fracturing altogether or, at a minimum, allow such fracturing processes within their jurisdictions to proceed but regulating the time, place and manner of those processes. In addition, federal agencies have asserted regulatory authority over the process. For instance, the BLM published a final rule in March 2015 that established new or more stringent standards relating to hydraulic fracturing on federal and American Indian lands but, in June 2016, a Wyoming federal judge struck down this final rule, finding that the BLM lacked authority to promulgate the rule. That decision is current being appealed by the federal government. In addition, Various studies have also been conducted or are currently underway by the EPA, and other federal agencies. concerning the potential environmental impacts of hydraulic fracturing activities. State and federal regulatory agencies have recently focused on a possible connection between the operation of injection wells used for oil and natural gas waste disposal and seismic activity. Similar concerns have been raised that hydraulic fracturing may also contribute to seismic activity. At the same time, certain environmental groups have suggested that additional laws may be needed to more closely and uniformly limit or otherwise regulate the hydraulic fracturing process, and legislation has been proposed by some members of Congress to provide for such regulation.

The adoption of new laws or regulations at the federal or state levels prohibiting, limiting or otherwise regulating the hydraulic fracturing process could make it more difficult, or even impossible, to complete oil and natural gas wells, increase our customers' costs of compliance and doing business, and otherwise adversely affect the hydraulic fracturing services they perform, which could negatively impact demand for our products and services. In addition, heightened political, regulatory, and public scrutiny of hydraulic fracturing practices could expose us or our customers to increased legal and regulatory proceedings, which could be time-consuming, costly, or result in substantial legal liability or significant reputational harm. We could be directly affected by adverse litigation involving us, or indirectly affected if the cost of compliance limits the ability of our customers to operate. Such costs and scrutiny could directly or indirectly, through reduced demand for our products and services, have a material adverse effect on our business, financial condition and results of operations.

We are subject to a number of federal and state laws and regulations, including the federal Occupational Safety and Health Act and comparable state statutes, establishing requirements to protect the health and safety of workers. Substantial fines and penalties can be imposed and orders or injunctions limiting or prohibiting certain operations may be issued in connection with any failure to comply with laws and regulations relating to worker health and safety.

Employees

As of December 31, 2016, we had 197 employees. 119 of our employees as of such date were based in the United States, 75 were based in Canada and three were based outside of North America. Our international operations are currently serviced by employees operating out of the United States and Canada. We are not a party to any collective bargaining agreements, and we consider our relations with our employees to be good.

Legal Proceedings

Due to the nature of our business, from time to time, we have various claims, lawsuits and administrative proceedings that are pending or threatened, all arising in the ordinary course of business, with respect to commercial, product liability and employee matters.

Our management currently does not expect that the results of any of these legal proceedings, either individually or in the aggregate, would have a material adverse effect on our financial position, results of operations or cash flows.

MANAGEMENT

Directors and Executive Officers

The following table sets forth the names and ages, as of April 15, 2017, of the individuals who will serve as our executive officers, key employees and members of our Board at the time of the offering.

Name	Age	Position
Robert Nipper	53	Chief Executive Officer and Director
Marty Stromquist	57	President and Director
Tim Willems	55	Chief Operations Officer
Ryan Hummer	40	Chief Financial Officer
Wade Bitter	54	Chief Accounting Officer and Treasurer
Kevin Trautner	50	Executive Vice President, General Counsel and Secretary
Don Battenfelder	57	President, North America
Roger Dwyer	43	Vice President, HSE
Richard Finney	55	Vice President, Manufacturing
John Ravensbergen	51	Vice President, Research & Development
Dustin Ellis	40	Vice President, Global Technical Services
Mike McKown	47	Vice President, U.S. Operations
Shawn Leggett	47	Vice President, Canadian Operations
Dave Anderson	43	Director of Anderson Thompson Reservoir Strategies
Don Getzlaf	58	Executive Advisor
Michael McShane	62	Chairman
John Deane	65	Director
Matthew Fitzgerald	59	Director
Gurinder Grewal	39	Director
David McKenna	49	Director
Franklin Myers	64	Director
W. Matt Ralls	67	Director

Robert Nipper

Mr. Nipper is our Chief Executive Officer, a position he has held since November 2016. He previously served as the Chairman of our Board from April 2016 to February 2017, our Chief Executive Officer from December 2012 until April 2016 and as Executive Chairman from April 2016 until November 2016. Mr. Nipper co-founded NCS in 2006 and has served on our Board since December 2012. He has more than 30 years of industry experience and has invented several patented technologies relating to downhole oil and natural gas and geothermal service equipment. Prior to founding NCS, Mr. Nipper spent 18 years with Tri-State Oil Tools Inc. and Baker Hughes, including various operations and sales management positions. Prior to leaving Baker Hughes, he held the position of North American Marketing Manager.

Marty Stromquist

Mr. Stromquist is our President, a position he has held since November 2016. He has served as a member of our Board since January 2010. Mr. Stromquist co-founded NCS and served as Chief Operating Officer from January 2010 to June 2015, Chief Technology Officer from June 2015 to March 2016 and Chief Executive Officer from March 2016 to November 2016, before being named to his current position. He has served in technical and management positions in the oil and natural gas industry for more than 35 years, in both service company and producer roles. He co-founded Cemblend Systems, Inc., which provided cementing solutions, and Frac Source, Inc., which specialized in stimulation services for unconventional reservoirs. He also served as operations manager of the well services group for Pioneer Natural Resources USA, Inc., and as technical

manager for stimulation services for Halliburton Energy Services Canada. He holds numerous patents for completion-related tools, processes and downhole procedures, and he has authored numerous technical papers and articles.

Tim Willems

Mr. Willems is our Chief Operations Officer, a position he has held since May 2015. Mr. Willems previously served as our President of U.S./International Operations from January 2012 to May 2015 and Senior Vice President from April 2010 to January 2012. Mr. Willems has more than 30 years' experience in the oil and natural gas industry, specializing in wellbore construction, completion and remediation. Sixteen of those years were spent in the international arena. He has held diverse positions, including applications engineering, operations, sales and marketing, and he has held vice president positions for a major service company in U.S. and international operations and marketing. Mr. Willems received a B.S. in Petroleum Engineering from Montana College of Mineral Science and Technology.

Ryan Hummer

Mr. Hummer is our Chief Financial Officer, a position he has held since November 2016. Mr. Hummer previously served as Executive Vice President, Corporate Development since August 2015 and as Vice President, Corporate Development from July 2014 until August 2015. Prior to joining us, Mr. Hummer served as Director, Investment Banking at Lazard Freres & Co. from January 2011 to April 2014, during which time he advised clients on a broad range of transactions, including mergers & acquisitions, restructuring and debt and equity capital raises. Mr. Hummer holds a B.S. in Economics from the Wharton School of the University of Pennsylvania.

Wade Bitter

Mr. Bitter is our Chief Accounting Officer and Treasurer, a position he has held since November 2016. He previously served as our Chief Financial Officer from January 2011 to November 2016. He has more than 25 years of corporate financial experience, including more than 20 years in the oilfield services industry. He has extensive experience with international accounting and reporting, currency and treasury functions, compliance and systems integrations and conversions. Mr. Bitter received an MBA from Utah State University and a B.S. in Finance from Brigham Young University.

Kevin Trautner

Mr. Trautner is our Executive Vice President, General Counsel and Secretary, a position he has held since November 2016. Mr. Trautner previously served as Vice President, General Counsel from July 2016 to November 2016. Prior to joining us, Mr. Trautner was a corporate and securities Partner at Andrews Kurth Kenyon LLP from March 2014 to July 2016 and a Partner at Norton Rose Fulbright US LLP from March 2007 to March 2014. Prior to that, Mr. Trautner was engaged in the private practice of law as an associate and then a Partner at other national law firms. Mr. Trautner has more than 20 years' experience in advising energy companies on corporate and securities matters including mergers and acquisitions, SEC filings and corporate governance matters. Mr. Trautner has a J.D. from the University of Virginia School of Law, an M.D. from the Vanderbilt University School of Medicine, and a B.S. from the University of Notre Dame.

Don Battenfelder

Mr. Battenfelder is our President of North American Operations, a position he has held since April 2016. He previously served as our President of Canada Operations from October 2012 to April 2016. Prior to joining us, Mr. Battenfelder was Vice President of Global Operations at Calfrac Well Services Ltd. ("Calfrac") since May 2000. Mr. Battenfelder has spent over 35 years in the oil and natural gas industry, primarily in the Canadian pressure-pumping sector. He was previously employed for 17 years by Fracmaster Ltd. and for 13 years by Calfrac, and held senior executive positions at both companies.

Roger Dwyer

Mr. Dwyer is our Vice President of Health, Safety and Environment, a position he has held since November 2016. He previously served as Vice President of Organization Development from May 2015 to November 2016. Prior to joining us, Mr. Dwyer served as Health, Safety and Environment Manager for the Canadian Division of Calfrac since October 2010. Prior to joining Calfrac, Mr. Dwyer held various positions with Jacobs Engineering Group Inc., from operations to Health, Safety and Environment Manager for Western Canada. Mr. Dwyer is a graduate of the University of Alberta with a Diploma in Occupational Health and Safety.

Richard Finney

Mr. Finney is our Vice President of Manufacturing, a position he has held since February 2016. Mr. Finney previously served as Director of Manufacturing from October 2014 until February 2016. Prior to joining us, Mr. Finney was a Plant Manager with Forum Energy Technologies, Inc. from October 2012 to March 2014 and had a 32 year career with Baker Hughes from June 1980 to October 2012, where he served in multiple positions including Manufacturing Supervisor, Plant Manager and Director of Manufacturing. Mr. Finney has more than 35 years of manufacturing experience in the oil and natural gas industry. His manufacturing experience includes a wide range of product categories, including fishing tools, float equipment, intelligent well systems, liners, multilateral equipment and packers. Mr. Finney received his Six Sigma Green Belt Certification from the University of Houston.

John Ravensbergen

Mr. Ravensbergen is our Vice President of Research and Development, a position he has held since April 2012. He previously served as an Engineering Manager since April 2011. Prior to joining us, Mr. Ravensbergen served as an Engineering Manager for Baker Hughes from September 2010 to April 2011, and before that for BJ Services Company since September 1996. Mr. Ravensbergen has over 20 years of experience in the oil and natural gas industry. His experience includes working as a design manager in coiled tubing research and development departments at Nowsco Well Services Ltd., BJ Services Company and Baker Oil Tools, Inc., where he developed innovative coiled tubing processes, deployment systems and bottomhole assemblies for underbalanced directional drilling, well cleanout, multilateral acid stimulation and, most recently, multi-stage hydraulic fracturing completions. He holds 18 patents and has authored a number of papers for the Society of Petroleum Engineers. Mr. Ravensbergen received a B.S. in Mechanical Engineering from the University of Calgary.

Dustin Ellis

Mr. Ellis is our Vice President of Global Technical Services, a position he has held since January 2014. He was previously the U.S. Technical Services Manager from November 2012 to January 2014. Prior to joining us, Mr. Ellis performed Operations and Field Engineering Manager roles at Baker Hughes since May 2003. Mr. Ellis has 16 years of experience in oil and natural gas, including well completions (open and cased hole), wellbore construction (including multilaterals), wellbore intervention, rig-site operations and pumping operations. His prior experience includes roles as rig supervisor, field engineer, field service technician, district manager, engineering manager and project manager for large service and operating companies in the United States. Mr. Ellis received a B.S. in Engineering from Texas A&M University.

Mike McKown

Mr. McKown is our Vice President of U.S. Operations, a position he has held since April 2016. Mr. McKown previously served as U.S. Sales Manager from November 2013 to April 2016 and Business Development Manager since October 2012. Prior to joining us, he was Deepwater Project Manager for Baker Hughes Incorporated since November 2010 and before that was a completion superintendent for EQT

Corporation in the Appalachian Basin. Mr. McKown has more than 25 years of experience in the oil and natural gas industry, including sand control systems, well completions and pumping operations. Mr. McKown oversees all operations and sales in the United States.

Shawn Leggett

Mr. Leggett is our Vice President of Canadian Operations, a position he has held since April 2016. Mr. Leggett previously served as Director of Sales and Business Development in Canada from April 2015 to April 2016 and Technical Services Manager since November 2010. Mr. Leggett is responsible for all of our operations and sales in Canada. He has more than 19 years of experience in the oil and natural gas industry with a focus on hydraulic fracturing. Before joining us, Mr. Leggett was a fracturing supervisor for Calfrac and later was a wellsite supervision consultant. He is a graduate of the Southern Alberta Institute of Technology in their Petroleum Engineering Technologist program.

Dave Anderson

Mr. Anderson is Director of our Anderson Thompson Reservoir Strategies team, a position he has held since February 2015. Prior to joining us, Mr. Anderson served as Executive Product Manager for IHS Markit from April 2013 to December 2014, where he managed the development of software for the oil and natural gas industry. Before joining IHS Markit, Mr. Anderson was Vice President at Fekete Associates since July 1996 where he oversaw the development of Fekete's petroleum engineering software suite. Mr. Anderson has over 20 years of experience in the petroleum industry as a reservoir engineer, has been a lecturer within the Society of Petroleum Engineers and is a recognized expert in the area of well performance analysis. He received his B.Sc. in Mechanical Engineering from the University of Calgary.

Don Getzlaf

Mr. Getzlaf has served as an Executive Advisor since June 2015. Mr. Getzlaf previously served as our Chief Technology Officer since January 2010, and since September 2016 has served as President of Fluid Energy Group. Mr. Getzlaf is a professional engineer with more than 35 years of oilfield experience, specializing in cementing, completions and field operations. Mr. Getzlaf has authored numerous papers on materials and methods related to oilfield cementing, and holds a number of patents and pending patents related to those disciplines. As an Executive Advisor at NCS, Mr. Getzlaf continues to design new and innovative solutions to industry challenges.

Michael McShane

Mr. McShane has served as the Chairman of our Board since February 2017 and as one of our directors since December 2012. Since September 2009, Mr. McShane has been an Operating Partner for Advent in the oil and natural gas services and equipment sector. Prior to his engagement with Advent, Mr. McShane was the Chairman and Chief Executive Officer of Grant Prideco Inc., a manufacturer and supplier of oilfield drill pipe and other drill stem products. Prior to joining Grant Prideco, Mr. McShane was Senior Vice President—Finance and Chief Financial Officer of BJ Services Company, a provider of pressure pumping, cementing, stimulation and coiled tubing services for oil and natural gas operators. Mr. McShane also serves on the board of directors of Superior Energy Services, Inc., Forum Energy Technologies Inc., Enbridge Inc. and Oasis Petroleum Inc. We believe that Mr. McShane's management experience and broad experience in the energy industry qualify him to serve as one of our directors.

John Deane

Mr. Deane has served as one of our directors since December 2012 and served as Chairman of the Board from December 2012 to April 2016. Since October 2009, Mr. Deane has been an Operating Partner for Advent in

the oil and natural gas industry, primarily in the services sector, and sits on the board of BOS Solutions Ltd. and RGL Reservoir Management Inc. Prior to his engagement with Advent, Mr. Deane served as President of ReedHycalog, L.P., Vice President of Schlumberger Limited, President of Hycalog and numerous executive and technical positions with Reed Tool Co. and Camco Intl. Mr. Deane has over 40 years of experience in the oil and natural gas industry, specializing in drilling technology. Mr. Deane holds a B.S. in Physics from the Colorado School of Mines. We believe that Mr. Deane's management experience and expertise in the oil and natural gas industry qualify him to serve as one of our directors.

Matthew Fitzgerald

Mr. Fitzgerald has served as one of our directors since February 2017. Mr. Fitzgerald is now a private investor and volunteer instructor and counselor with SCORE (Service Corp of Retired Executives), an affiliate of the Small Business Administration. From 2009 until July 2013, Mr. Fitzgerald served as President of Total Choice Communications LLC, a wireless retailer in Houston, Texas. Mr. Fitzgerald retired from Grant Prideco, Inc. following its merger with National Oilwell Varco in 2008. He had served as Senior Vice President and Chief Financial Officer beginning in January 2004 and as Treasurer beginning in February 2007. Mr. Fitzgerald held the positions of Executive Vice President, Chief Financial Officer, and Treasurer of Veritas DGC from 2001 until January 2004. Mr. Fitzgerald also served as Vice President and Controller for BJ Services Company from 1989 to 2001. Mr. Fitzgerald currently serves on the board of directors, as chairman of the audit committee and the corporate governance and nominating committee of Independence Contract Drilling, Inc. He previously served on the board of directors of Rosetta Resources, Inc. and Maverick Oil and Gas, Inc. Mr. Fitzgerald began his career as a certified public accountant with the accounting firm of Ernst & Whinney. He holds a Bachelor of Business Administration in Accounting and a Masters in Accountancy from the University of Florida. We believe that Mr. Fitzgerald's diverse management experience and experience serving as a director qualifies him to serve as one of our directors.

Gurinder Grewal

Mr. Grewal has served as one of our directors since December 2012. He is a managing director of Advent, focusing on investments in the energy and industrial sectors. Prior to joining Advent, Mr. Grewal was a vice president at Bain Capital where he was involved in investments in several large companies in the industrial, media and retail sectors. He currently serves on the boards of directors of BOS Solutions Ltd., Oleoducto Central S.A. (Ocensa), RGL Reservoir Management Inc., Quala and Culligan International Group. Mr. Grewal received an HBA from the Richard Ivey School of Business at the University of Western Ontario and an M.B.A. from Harvard Business School. We believe that Mr. Grewal's experience in the private equity and energy industries qualifies him to serve as one of our directors.

David McKenna

Mr. McKenna has served as one of our directors since December 2012. He is a managing partner of Advent and coordinates the firm's investment efforts in the North American industrial sector. Mr. McKenna joined Advent in 1992 and for eight years held various positions, including head of the firm's Hong Kong office. In 2000, he joined Bain Capital, where he spent three years as a senior dealmaker working on large investments in the industrial, retail and consumer sectors before rejoining Advent in 2003. Mr. McKenna currently serves on the boards of directors of BOS Solutions Ltd., RGL Reservoir Management Inc. and Serta Simmons Bedding LLC and previously served on the boards of ABC Supply Co. Inc., Aspen Technology Inc., Boart Longyear Limited, Bradco Supply and Keystone Automotive Operations Inc. He holds an A.B. in English from Dartmouth College. We believe that Mr. McKenna's experience at Advent and as a director of numerous private and public companies provides insight that is beneficial to our Board.

Franklin Myers

Mr. Myers has served as one of our directors since February 2017. Mr. Myers serves as Senior Advisor to Quantum Energy Partners, a Houston-based private equity firm. Previously, Mr. Myers served as Senior Advisor

to Cameron International Corporation, a publicly traded provider of flow equipment products, from April 2008 through March 2009, prior to which, from 2003 through March 2008, he served as the Senior Vice President and Chief Financial Officer. From 1995 to 2003, he served as Senior Vice President and President of a division within Cooper Cameron Corporation, as well as General Counsel and Secretary. Prior to joining Cooper Cameron Corporation in 1995, Mr. Myers served as Senior Vice President and General Counsel of Baker Hughes Incorporated, and as attorney and partner at the law firm of Fulbright & Jaworski (now known as Norton Rose Fulbright). Mr. Myers currently serves on the board of directors of Forum Energy Technologies, Inc., ION Geophysical Corporation, Comfort Systems USA, Inc. and HollyFrontier Corporation. Mr. Myers also served as an operating adviser for Paine Partners, a private equity fund, from 2009 through December 2012. We believe that Mr. Myers's management experience and experience serving as a director of numerous public companies qualify him to serve as one of our directors.

W. Matt Ralls

Mr. Ralls has served as one of our directors since March 2017. Mr. Ralls previously served as Executive Chairman of Rowan Companies plc ("Rowan") from April 2014 to April 2016, its Chief Executive Officer from January 2009 until April 2014, and its President from January 2009 to April 2013. Mr. Ralls served as Senior Vice President and Chief Financial Officer from 2001 to 2005 and as Executive Vice President and Chief Operating Officer of GlobalSantaFe Corporation from 2005 until the completion of the merger of GlobalSantaFe with Transocean, Inc. in 2007. Mr. Ralls currently serves on the board of directors Cabot Oil & Gas Corporation and Superior Energy Services, Inc. Mr. Ralls previously served on the boards of several other publicly traded companies as well as the boards of the American Petroleum Institute, the National Oceanic Industries Association and the International Association of Drilling Contractors. We believe that Mr. Ralls' boardroom experience and broad management experience in the oil and gas industry qualify him to serve as one of our directors.

Board of Directors

Our business and affairs are managed under the direction of our Board. Our amended and restated certificate of incorporation will provide that our Board consist of nine directors. Contemporaneously with this offering, our Board will be composed of nine directors.

Our amended and restated certificate of incorporation will provide that our Board will be divided into three classes, with one class being elected at each annual meeting of stockholders. Each director will serve a three-year term, with termination staggered according to class. Class I will initially consist of three directors, Class II will initially consist of three directors and Class III will initially consist of three directors. The Class I directors, whose terms will expire at the first annual meeting of our stockholders following the filing of our amended and restated certificate of incorporation, will be Franklin Myers, Gurinder Grewal and Michael McShane. The Class II directors, whose terms will expire at the second annual meeting of our stockholders following the filing of our amended and restated certificate of incorporation, will be Matthew Fitzgerald, David McKenna and Robert Nipper. The Class III directors, whose terms will expire at the third annual meeting of our stockholders following the filing of our amended and restated certificate of incorporation, will be W. Matt Ralls, John Deane and Marty Stromquist. See "Description of Capital Stock—Anti-takeover Provisions."

Director Independence and Controlled Company Exemption

After the completion of this offering, we will qualify as a "controlled company" and will be able to rely on the controlled company exemption under the corporate governance rules of NASDAQ. As a controlled company, we will not be required to have a majority of "independent directors" on our Board as defined under the rules of NASDAQ or to have a compensation committee or a Board committee performing the Board nominating function composed entirely of independent directors. The "controlled company" exemption does not modify the independence requirements for the audit committee which requires that our audit committee be composed of at least three independent members, subject to a permitted "phase-in" period within one year of listing.

Even though we will qualify as a controlled company, we expect to have a majority of independent directors serving on our Board. Our Board has affirmatively determined that Messrs. McShane, Deane, Fitzgerald, Grewal, McKenna, Myers and Ralls are independent under applicable NASDAQ rules. In addition, we expect the audit committee and the compensation, nominating and corporate governance committee to be composed entirely of independent directors.

If at any time we cease to be a "controlled company" under the rules of NASDAQ, our Board will take all action necessary to comply with the NASDAQ corporate governance rules, including appointing a majority of independent directors to our Board and establishing certain committees composed entirely of independent directors, subject to a permitted "phase-in" period.

Board Committees

Upon consummation of this offering our Board will establish an audit committee and compensation, nominating and corporate governance committee. Each committee will operate under a charter that will be approved by our Board and will have the composition and responsibilities described below. Members will serve on these committees until their resignations or until otherwise determined by our Board. The charter of each committee will be available on our website.

Audit Committee. The primary purposes of our audit committee are to assist our Board's oversight of:

- audits of our financial statements;
- the integrity of our financial statements;
- our process relating to risk management and the conduct and systems of internal control over financial reporting and disclosure controls and procedures;
- the qualifications, engagement, compensation, independence and performance of our independent auditor; and
- the performance of our internal audit function.

Upon the consummation of this offering, and prior to the listing of our common stock, our audit committee will be composed of Messrs. Fitzgerald, Myers and Ralls. Mr. Fitzgerald will serve as chair of the audit committee. Messrs. Fitzgerald, Myers and Ralls qualify as an "audit committee financial expert" as such term has been defined by the SEC in Item 407(d) of Regulation S-K. Our Board has affirmatively determined that Messrs. Fitzgerald, Myers and Ralls meet the definition of an "independent director" for the purposes of serving on the audit committee under applicable NASDAQ rules and Rule 10A-3 under the Exchange Act. The audit committee will be governed by a charter that complies with the rules of NASDAQ.

Compensation, Nominating and Corporate Governance Committee. The primary purposes of our compensation, nominating and corporate governance committee is to:

- determine and approve the compensation of our executive officers;
- review and approve incentive compensation and equity compensation policies and programs;
- recommend to the Board for approval the qualifications, qualities, skills and expertise required for Board membership;
- identify potential members of our Board consistent with the criteria approved by our Board and select and recommend to our Board the director nominees for election at the next annual meeting of stockholders or to otherwise fill vacancies;
- evaluate and make recommendations regarding the structure, membership and governance of the committees of our Board;

- develop and make recommendations to our Board with regard to our corporate governance policies and principles; and
- oversee the annual review of our Board's performance.

Upon the consummation of this offering, Messrs. Deane, McShane, Myers and Ralls will serve on the compensation, nominating and corporate governance committee, and Mr. Deane will serve as the chairman. Our Board has affirmatively determined that Messrs. Deane, McShane, Myers and Ralls meet the definition of an "independent director" for the purposes of serving on the committee under applicable NASDAQ rules. The compensation, nominating and corporate governance committee will be governed by a charter that complies with the rules of NASDAQ.

Compensation Committee Interlocks and Insider Participation

The members of our compensation, nominating and corporate governance committee during 2017 were Messrs. Deane, McShane, Myers and Ralls. During 2017, none of our executive officers served (i) as a member of the compensation, nominating and corporate governance committee or board of directors of another entity, one of whose executive officers served on our compensation, nominating and corporate governance committee, or (ii) as a member of the compensation committee of another entity, one of whose executive officers served on our Board.

Indemnification of Directors

Our amended and restated certificate of incorporation will provide that we will indemnify our directors to the fullest extent permitted by the DGCL.

We intend to enter into indemnification agreements with each of our directors prior to the completion of this offering. The indemnification agreements will provide our directors with contractual rights to indemnification, expense advancement and reimbursement, to the fullest extent permitted under the DGCL, subject to certain exceptions contained in those agreements.

Code of Business Conduct and Ethics

Prior to the completion of this offering, we will implement a code of business conduct and ethics that applies to all of our employees, officers, agents, consultants, representatives, affiliates, subsidiaries and anyone who is authorized to act on our behalf. A copy of the code will be available on our website located at www.ncsmultistage.com. Any amendments or waivers from our code for our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, to our code will be disclosed on our Internet website promptly following the date of such amendment or waiver.

Corporate Governance Guidelines

Our Board will adopt corporate governance guidelines in accordance with the corporate governance rules of NASDAQ that serve as a flexible framework within which our Board and its committees operate. These guidelines will cover a number of areas including the duties and responsibilities of our Board, director independence, Board leadership structure, executive sessions, CEO evaluations, management development and succession planning, director nominations and qualifications director orientation and continuing education, Board agenda and meeting information, director access to company employees and independent advisers, Board communication with stockholders and others, director compensation and annual board and committee performance evaluations. A copy of our corporate governance guidelines will be posted on our website.

EXECUTIVE AND DIRECTOR COMPENSATION

The following discussion and analysis of compensation arrangements should be read with the compensation tables and related disclosures set forth below. This discussion contains forward-looking statements that are based on our current plans and expectations regarding future compensation programs. See "Cautionary Note Regarding Forward-Looking Statements." Actual compensation programs that we adopt may differ materially from the programs summarized in this discussion.

Overview

The discussion below includes a review of our compensation decisions with respect to 2016 for our named executive officers ("NEO"), namely our principal executive officer and our two other most highly compensated executive officers. Our NEOs for 2016 were:

- Robert Nipper
- Tim Willems
- Wade Bitter

In 2016, we compensated our NEOs through a combination of base salary and annual cash bonuses. Our executive officers are also eligible to receive certain benefits, which include a 401(k) plan with matching contributions, life insurance, automobile allowances and group health insurance, including medical, dental and vision insurance.

Summary Compensation Table

The following table sets forth certain information for 2016 concerning the total compensation awarded to, earned by or paid to our NEOs.

Name and principal position	Year	Salary(1)	Bonus(1)	Non-Qualified Deferred Compensation Earnings	All other compensation (2)	Total
Robert Nipper						
Chief Executive Officer	2016	$208,154	$ 2,220	$ —	$ 48,260	$258,634
Tim Willems						
Chief Operations Officer	2016	$268,953	$ 2,220	—	$ 46,916	$318,089
Wade Bitter						
Chief Accounting Officer & Treasurer	2016	$255,067	$ 2,220	$ 3,073	$ 43,689	$304,049

(1) Represents annual salary and bonus amounts paid pursuant to the terms of each of Mr. Nipper's, Mr. Willems' and Mr. Bitter's employment agreement. See "—Employment Agreements." The terms of our employment agreements with each of the NEOs provide that any bonuses are entirely at the discretion of the Board.

(2) Includes the following, as set forth below:

Name and principal position	Automobile allowance	401(k) matching and contributions	Health insurance premiums	Total
Robert Nipper Chief Executive Officer	$ 21,150	$ 9,172	$ 17,938	$48,260
Tim Willems Chief Operations Officer	$ 21,150	$ 11,604	$ 14,162	$46,916
Wade Bitter Chief Accounting Officer & Treasurer	$ 14,950	$ 10,801	$ 17,938	$43,689

Outstanding Equity Awards as of December 31, 2016

The following table sets forth certain information about outstanding equity awards held by our NEOs as of December 31, 2016.

Name	Option grant date	Number of securities underlying unexercised options exercisable (#)	Number of securities underlying unexercised options unexercisable (#)	Option exercise price(5)	Option expiration date
Robert Nipper	12/21/2012	132,441(1)	281,430(1)	$ 5.878	12/21/2022
Chief Executive Officer					
Tim Willems	1/1/2011	119,235	—	$ 1.237	1/1/2018
Chief Operations Officer	12/21/2012	36,678(2)	77,934(2)	$ 5.878	12/21/2022
Wade Bitter	2/9/2011	45,582	—	$ 1.237	2/9/2018
Chief Accounting Officer & Treasurer	12/21/2012	2,889(3)	6,132(3)	$ 5.878	12/21/2022
	4/3/2013	6,840(4)	21,660(4)	$ 5.878	4/3/2023

(1) Represents options to purchase (i) 165,549 shares of common stock which vest over five years, with 20% vesting each year beginning on December 21, 2013 and (ii) 248,322 shares of common stock which shall vest effective as of the consummation of a Company Sale, as defined in our 2012 Equity Incentive Plan (the "2012 Equity Incentive Plan") as any transaction or series of related transactions in which any person or group of persons other than Advent or their affiliates acquire 50% or more of the voting power at elections for the Board, or the sale, transfer or other disposition of all or substantially all of our assets, in one or a series of related transactions ("Company Sale"), provided that on each applicable vesting date Mr. Nipper is still then employed by us. In connection with this offering, the terms of any options that vest upon a Company Sale shall be amended to provide that such awards shall vest over three years, with 33% vesting each year beginning on the first anniversary of the consummation of this offering, subject to accelerated vesting upon a Company Sale (as defined in our 2012 Equity Incentive Plan), provided that on each applicable vesting date the award holder is still employed by us.

(2) Represents options to purchase (i) 45,846 shares of common stock which vest over five years, with 20% vesting each year beginning on December 21, 2013 and (ii) 68,766 shares of common stock which shall vest effective as of the consummation of a Company Sale, provided that on each applicable vesting date Mr. Willems is still then employed by us. In connection with this offering, the terms of any options that vest upon a Company Sale shall be amended to provide that such awards shall vest over three years, with 33% vesting each year beginning on the first anniversary of the consummation of this offering, subject to accelerated vesting upon a Company Sale (as defined in our 2012 Equity Incentive Plan), provided that on each applicable vesting date the award holder is still employed by us.

(3) Represents options to purchase 3,609 shares of common stock which vest over five years, with 20% vesting each year beginning on December 21, 2013, and 5,412 shares of common stock which shall vest effective as of the consummation of a Company Sale, provided that on each applicable vesting date Mr. Bitter is still then employed by us. In connection with this offering, the terms of any options that vest upon a Company Sale shall be amended to provide that such awards shall vest over three years, with 33% vesting each year beginning on the first anniversary of the consummation of this offering, subject to accelerated vesting upon a Company Sale (as defined in our 2012 Equity Incentive Plan), provided that on each applicable vesting date the award holder is still employed by us.

(4) Represents options to purchase (i) 11,400 shares of common stock which vest over five years, with 20% vesting each year beginning on April 3, 2014 and (ii) 17,100 shares of common stock which shall vest effective as of the consummation of a Company Sale, provided that on each applicable vesting date Mr. Bitter is still then employed by us. In connection with this offering, the terms of any options that vest upon a Company Sale shall be amended to provide that such awards shall vest over three years, with 33% vesting each year beginning on the first anniversary of the consummation of this offering, subject to accelerated vesting upon a Company Sale (as defined in our 2012 Equity Incentive Plan), provided that on each applicable vesting date the award holder is still employed by us.

(5) The option exercise prices reflect an adjustment downward by $4.648 per share in connection with the payment of the 2014 Dividend in order to preserve the intrinsic value of the options giving effect to the 2014 Dividend.

Employment Agreements

We are currently party to employment agreements with each of our NEOs. The material provisions of each such agreement are described below.

In February 2017, we entered into amended and restated employment agreements with each of Robert Nipper, our Chief Executive Officer, Tim Willems, our Chief Operations Officer and Wade Bitter, our Chief

Accounting Officer and Treasurer, each of whom we refer to as an Executive. The agreements provide for an initial term of three years from December 30, 2015 (or in the case of Mr. Bitter's agreement December 31, 2015), which will automatically renew at the end of such period for an additional three year-period, and at the end of each three-year period thereafter. The agreements provide that the Executives will receive an annualized base salary subject to review by our Board (currently $324,480 for Mr. Nipper, $296,400 for Mr. Willems and $279,740 for Mr. Bitter). The agreements also provide that the Executives are eligible to receive discretionary bonuses during the employment period as the Board may determine.

Either we or the Executive may terminate the agreement at any time prior to the end of the term of the agreement or any renewal term upon written notice. We may terminate the Executive's employment for death, disability, by resolution of our Board for cause or without cause. The Executive may resign following a good reason event or without a good reason event. The employment agreements may also be terminated upon the sale of substantially all of the assets of the Company or the sale of more than fifty percent of the equity interests of the Company.

If we terminate an Executive's employment other than for cause or the Executive resigns following a good reason event, prior to the end of the term of the agreement or any renewal term then, in addition to any accrued but unpaid base salary, we must provide the Executive with, subject to his execution of a release of claims, such release becoming effective and his continued compliance with the restricted covenants contained in his agreement, (i) all previously earned but unpaid bonuses for the fiscal period prior to the fiscal period when such termination occurs, (ii) base salary continuation for the twelve-month period following the date of the termination; provided that if we elect to extend the restrictive covenant period (described below) to two years then such base salary continuation shall be for a twenty-four month period, and (iii) benefits for which the Executive is eligible through the end of the twelve-month period following the date of termination (in the case of Mr. Nipper, we shall pay the difference between the cost of such benefits under COBRA and the amount Mr. Nipper would have paid had he remained employed).

If an Executive's employment is terminated as a result of death, disability, voluntary resignation other than following a good reason event, by resolution of our Board for cause or upon the sale of substantially all of our assets or more than fifty percent of our equity interests, the Executive shall only be entitled to receive accrued but unpaid base salary and benefits through the date of termination.

For purposes of the agreements, good reason event means a material breach of the agreement by us that we have not cured within thirty (30) days after written notice of such breach is given to us by the Executive no later than thirty (30) days after the initial existence of the breach.

For purposes of the agreements, cause means (1) a breach of the Executive's covenants under the agreement or any other agreements between the Executive and us that, if susceptible to cure, has not been cured within thirty (30) days after written notice to the Executive; (2) the conviction (or plea of no contest/*nolo contendere*) of a felony or a crime involving moral turpitude, or commission of any act or omission involving dishonesty or fraud with respect to us or any act by the Executive causing material harm to our standing or reputation or to any of our subsidiaries; (3) any act by the Executive that causes the Company to violate a local, state, federal, tribal or any other applicable statute, regulation or law of any jurisdiction (including foreign jurisdictions) causing substantial or material harm to us; (4) negligence or willful misconduct in the conduct or management of the Company, subject to the Executive's right to cure any negligence within thirty (30) days after written notice, to the extent susceptible to cure; (5) the Executive's misappropriation of the Company's assets (of any significance) or business opportunities; (6) the Executive's failure to comply with the reasonable and lawful directives of the Board, subject to the Executive's right to cure within thirty (30) days after written notice, to the extent susceptible to cure; (7) the Executive's misrepresentation to the Board of, or willful failure to disclose to the Board, information material to us, our business or our operations; or (8) the use of illegal drugs, or the use of legal drugs or alcohol in any manner that adversely in any material respect affects the Executive's ability to perform his duties under the agreement.

The agreements include perpetual confidentiality provisions, a company non-disparagement provision, an assignment of inventions provision as well as provisions relating to non-competition and non-solicitation that apply during employment and for one year following a termination of employment by us other than for cause or resignation by the Executive following a good reason event or for two years following a termination of employment for any other reason; provided that we may extend such period to two years following a termination of employment by us other than for cause or resignation by the Executive following a Good Reason Event if we continue to provide the severance payments described above for such period.

Potential Payments Upon Termination Of Employment Or Change Of Control

Our NEOs are entitled to certain payments in the event their employment is terminated by us other than for cause or by the NEO for good reason, as provided in "—Employment Agreements." Additionally, certain of the options held by our NEOs would vest upon the occurrence of a Company Sale (as defined in the 2012 Equity Incentive Plan).

Director Compensation

Directors who are employed by us or who are full-time investment professionals of Advent are not eligible to receive compensation for their service on our Board. All other members of our Board received $250,000 as compensation for their services as members of our Board in 2016.

Following this offering, we expect to pay directors who are not employed by us and who are not full-time investment professionals of Advent an annual retention fee of $50,000 in cash. Such directors shall also receive an annual award of restricted stock units in an amount of $125,000, such award becoming fully vested on the one year anniversary of the grant date, and receive a fee of $2,000 per Board or committee meeting attended. Each such director shall also receive a one-time grant of restricted stock units upon election to the Board in an amount of $100,000, which award vesting in equal increments over a period of three years from the grant date. The chair of the audit committee, the chair of the compensation nominating and corporate governance committee will receive an additional annual fee in cash of $18,000 and $10,000, respectively. The Chairman of our Board will also receive an additional $50,000 annual fee in cash and an additional annual award of restricted stock units in an amount of $50,000.

Equity Incentive Plans

2011 Plan

The NCS Energy Holdings, LLC 2011 Equity Incentive Plan (the "2011 Plan") provided awards to employees, directors and consultants of HoldCo. In connection with Advent's acquisition of HoldCo in 2012, we assumed the outstanding options under the 2011 Plan and converted them into options to purchase shares of our common stock (the "Rollover Options").

2012 Plan

The 2012 Plan provides for the grant of options, stock appreciation rights, restricted stock, dividend equivalents and other stock-based awards to employees, directors and consultants.

The 2012 Plan is administered by our Board. The Board has the authority to interpret and administer the 2012 Plan to determine to whom we grant incentive awards under the 2012 Plan, the type and amount of awards to be granted, the terms and conditions of the awards and the terms of award agreements. The Board, in its sole discretion, can interpret, clarify, construe or resolve any ambiguity in any provision of the 2012 Plan or any award agreement thereunder, accelerate or waive vesting of any award and exercisability of any award, extend the term or period of exercisability of any award, modify the purchase price, or waive any terms or conditions applicable to any award. All actions taken and all interpretations and determinations made by the Board shall be final and binding upon all 2012 Plan participants, us and all other interested parties.

We do not intend to grant any awards under the 2012 Plan following the offering. The Board may amend, alter, suspend, discontinue or terminate the 2012 Plan or any award under the 2012 Plan at any time, provided such action will not adversely affect the rights granted to any participant under any outstanding award without the participant's consent.

2017 Plan

In connection with this offering, our Board expects to adopt, and our stockholders expect to approve, the 2017 Plan prior to the completion of this offering. The following summary of certain features of the 2017 Plan is not a complete description of all of the provisions of the 2017 Plan, and is qualified in its entirety by reference to the full text of the 2017 Plan, a copy of which is filed as an exhibit to the registration statement of which this prospectus is a part.

Reservation of Shares

Subject to adjustments as described below, the maximum aggregate number of shares of common stock that may be issued pursuant to awards granted under the 2017 Plan will be 4,532,523. Any shares of common stock delivered under the 2017 Plan will consist of authorized and unissued shares, or treasury shares.

In the event of any recapitalization, reclassification, stock dividend, extraordinary dividend, stock split, reverse stock split, or other distribution with respect to our common stock, or any merger, reorganization, consolidation, combination, spin-off or other similar corporate change, or any other change affecting our common stock, appropriate and equitable adjustments will be made to the number and kind of shares of common stock available for grant, as well as to other maximum limitations under the 2017 Plan, and the number and kind of shares of common stock or other terms of the awards that are affected by the event.

Share Counting

Awards that are required to be paid in cash pursuant to their terms will not reduce the share reserve. To the extent that an award granted under the 2017 Plan is canceled, expired, forfeited, surrendered, settled by delivery of fewer shares than the number underlying the award or otherwise terminated without delivery of the shares to the participant, the shares of common stock retained by or returned to us will not be deemed to have been delivered under the 2017 Plan, and will be available for future awards under the 2017 Plan. Notwithstanding the foregoing, shares that are (i) withheld or separately surrendered from an award in payment of the exercise or purchase price or taxes relating to such an award or (ii) not issued or delivered as a result of the net settlement of an outstanding stock option or stock appreciation right will be deemed to constitute delivered shares and will not be available for future awards under the 2017 Plan.

Administration

The 2017 Plan will be administered by the compensation, nominating and corporate governance committee, such other committee of the Board appointed by the Board or the Board, as determined by the Board (the "Plan Administrator"). Subject to the limitations set forth in the 2017 Plan, the Plan Administrator has the authority to, among other things, determine the persons to whom awards are to be granted, prescribe the restrictions, terms and conditions of all awards, interpret the 2017 Plan and terms of awards and adopt rules for the administration, interpretation and application of the 2017 Plan.

Eligibility

Awards under the 2017 Plan may be granted to any employees, non-employee directors, consultants or other personal service providers to us or any of our subsidiaries.

Stock Options

Stock options granted under the 2017 Plan may be issued as either incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, or as nonqualified stock options. The exercise price of an option will be not less than 100% of the fair market value of a share of common stock on the date of the grant of the option, or such higher amount determined by the Plan Administrator. The Plan Administrator will determine the vesting and/or exercisability requirements and the term of exercise of each option, including the effect of termination of service of a participant or a change of control. The vesting requirements may be based on the continued employment or service of the participant for a specified time period or on the attainment of specified performance goals established by the Plan Administrator. The maximum term of an option will be ten years from the date of grant.

To exercise an option, the participant must pay the exercise price, subject to specified conditions, (i) in cash or, (ii) to the extent permitted by the Plan Administrator, (A) in shares of common stock, (B) through an open-market broker-assisted transaction, (C) by reducing the number of shares of common stock otherwise deliverable upon the exercise of the stock option, (D) by combination of any of the above methods, or (E) by such other method approved by the Plan Administrator, and must satisfy any required tax withholding amounts. All options generally are nontransferable. Without the prior approval of our stockholders, the 2017 Plan prohibits the cancellation of underwater stock options in exchange for cash or another award (other than in connection with a change of control) or the "repricing" of stock options. Dividends will not be paid with respect to stock options. Dividend equivalent rights may be granted with respect to the shares of common stock subject to stock options to the extent permitted by the Plan Administrator and set forth in the award agreement.

Stock Appreciation Rights

A stock appreciation right may be granted either in tandem with an option or without a related option. A stock appreciation right entitles the participant, upon settlement or exercise, to receive a payment based on the excess of the fair market value of a share of common stock on the date of settlement or exercise over the base price of the right, multiplied by the number of shares of common stock as to which the right is being settled or exercised. Stock appreciation rights may be granted on a basis that allows for the exercise of the right by the participant or that provides for the automatic payment of the right upon a specified date or event. The base price per share of a stock appreciation right may not be less than the fair market value of a share of common stock on the date of grant. The Plan Administrator will determine the vesting requirements and the term of exercise of each stock appreciation right, including the effect of termination of service of a participant or a change of control. The vesting requirements may be based on the continued employment or service of the participant for a specified time period or on the attainment of specified business performance goals established by the Plan Administrator. The maximum term of a stock appreciation right will be ten years from the date of grant. Stock appreciation rights may be payable in cash or in shares of common stock or in a combination of both. Without the prior approval of our stockholders, the 2017 Plan prohibits the cancellation of underwater stock appreciation rights in exchange for cash or another award (other than in connection with a change of control) or the "repricing" of stock appreciation rights. Dividends shall not be paid with respect to stock appreciation rights. Dividend equivalent rights may be granted with respect to the shares of common stock subject to stock appreciation rights to the extent permitted by the Plan Administrator and set forth in the award agreement.

Restricted Stock Awards

A restricted stock award represents shares of common stock that are issued subject to restrictions on transfer and vesting requirements. The vesting requirements may be based on the continued service of the participant for a specified time period or on the attainment of specified performance goals established by the Plan Administrator, and/or on such other terms and conditions as approved by the Plan Administrator in its discretion. Unless otherwise set forth in an award agreement, restricted stock award holders will have all of the rights of our stockholders, including the right to vote the shares and the right to receive dividends, during the restricted period.

Any dividends with respect to a restricted stock award that is subject to performance-based vesting may be subject to the same restrictions on transfer and vesting requirements as the underlying restricted stock award.

Restricted Stock Units

An award of an RSU provides the participant the right to receive a payment based on the value of a share of common stock. RSUs may be subject to vesting requirements, restrictions and conditions to payment. Such requirements may be based on the continued service of the participant for a specified time period, on the attainment of specified performance goals established by the Plan Administrator and/or on such other terms and conditions as approved by the Plan Administrator in its discretion. In addition, an RSU may be designated as a performance stock unit ("PSU"), the vesting requirements of which may be based, in whole or in part, on the attainment of pre-established performance goal(s) over a specified performance period designed to meet the requirements for exemption under Section 162(m) of the Internal Revenue Code, or otherwise, as approved by the Plan Administrator in its discretion. An RSU award will become payable to a participant at the time or times determined by the Plan Administrator and set forth in the award agreement, which may be upon or following the vesting of the award. RSUs are payable in cash or in shares of common stock or in a combination of both. RSUs may, but are not required to, be granted together with a dividend equivalent right with respect to the shares of common stock subject to the award. Dividend equivalent rights may be subject to conditions that apply to the underlying RSUs.

Stock Awards

A stock award represents shares of common stock that are issued free of restrictions on transfer and free of forfeiture conditions and to which the participant is entitled all incidents of ownership. A stock award may be granted for past services, in lieu of bonus or other cash compensation, directors' fees or for any other valid purpose as determined by the Plan Administrator. The Plan Administrator will determine the terms and conditions of stock awards, and such stock awards may be made without vesting requirements, subject to certain conditions. Upon the issuance of shares of common stock under a stock award, the participant will have all rights of a stockholder with respect to such shares of common stock, including the right to vote the shares and receive all dividends and other distributions on the shares.

Cash Performance Awards

A cash performance award is denominated in a cash amount (rather than in shares) and is payable based on the attainment of pre-established business and/or individual performance goals over a specified performance period. The requirements for vesting may be also based upon the continued service of the participant during the performance period. The maximum amount of cash performance awards intended to qualify as "performance-based compensation" under Section 162(m) of the Internal Revenue Code that may be paid to a participant during any one calendar year under all cash performance awards is .

Performance Criteria

For purposes of cash performance awards, PSUs, as well as for any other awards under the 2017 Plan intended to qualify as "performance-based compensation" under Section 162(m) of the Internal Revenue Code, the performance criteria will be one or any combination of the following, for us or any identified subsidiary or business unit, as determined by the Plan Administrator at the time of the award: (i) net earnings; (ii) earnings per share; (iii) net debt; (iv) revenue or sales growth; (v) net or operating income; (vi) net operating profit; (vii) return measures (including, but not limited to, return on assets, capital, equity or sales); (viii) cash flow (including, but not limited to, operating cash flow, distributable cash flow and free cash flow); (ix) earnings before or after taxes, interest, depreciation, amortization and/or rent; (x) share price (including, but not limited to growth measures and total stockholder return); (xi) expense control or loss management; (xii) market share; (xiii) economic value added; (xiv) working capital; (xv) the formation of joint ventures or the completion of

other corporate transactions; (xvi) gross or net profit margins; (xvii) revenue mix; (xviii) operating efficiency; (xix) product diversification; (xx) market penetration; (xxi) measurable achievement in quality, technology, operation or compliance initiatives; (xxii) quarterly dividends or distributions; (xxiii) employee retention or turnover; (xxiv) operating income before depreciation, amortization and certain additional adjustments to operating income permitted under our senior secured credit facilities, and/or (xxv) any combination of or a specified increase or decrease, as applicable in any of the foregoing. Each of the performance criteria shall be applied and interpreted in accordance with an objective formula or standard established by the Plan Administrator at the time the applicable award is granted including, without limitation, GAAP.

At the time that an award is granted, the Plan Administrator may provide that performance will be measured in such objective manner as it deems appropriate, including, without limitation, adjustments to reflect charges for restructurings, non-operating income, the impact of corporate transactions or discontinued operations, events that are unusual in nature or infrequent in occurrence and other non-recurring items, currency fluctuations, litigation or claim judgments, settlements and the cumulative effects of accounting or tax law changes. In addition, with respect to a participant hired or promoted following the beginning of a performance period, the Plan Administrator may determine to prorate the amount of any payment in respect of such participant's cash performance awards or PSUs for the partial performance period, to the extend not inconsistent with Section 162(m) of the Internal Revenue Code.

Further, the Plan Administrator shall, to the extent provided in an award agreement, have the right, in its discretion, to reduce or eliminate the amount otherwise payable to any participant under an award and to establish rules or procedures that have the effect of limiting the amount payable to any participant to an amount that is less than the amount that is otherwise payable under an award. Following the conclusion of the performance period, the Plan Administrator shall certify in writing whether the applicable performance goals have been achieved.

Award Limitations

For purposes of complying with the requirements of Section 162(m) of the Internal Revenue Code, the maximum number of shares of common stock that may be subject to stock options, stock appreciation rights, performance-based restricted stock awards, performance-based RSUs and performance-based stock awards granted to any participant other than a non-employee director during any calendar year will be limited to 450,000 shares of common stock for each such award type individually.

Further, no non-employee director may be granted, during any calendar year, awards under the 2017 Plan having a fair value (determined on the date of grant) that, when added to all cash compensation paid to the non-employee director during the same calendar year, exceed $750,000.

Effect of Change of Control

Upon the occurrence of a "change of control" (as defined in the 2017 Plan), unless otherwise provided in the applicable award agreement, the Plan Administrator is authorized to make adjustments in the terms and conditions of outstanding awards, including without limitation the following (or any combination thereof): (i) continuation or assumption of such outstanding awards by us (if it is the surviving company or corporation) or by the surviving company or corporation or its parent; (ii) substitution by the surviving company or corporation or its parent of awards with substantially the same terms as such outstanding awards (with appropriate adjustments to the type of consideration payable upon settlement of the awards); (iii) acceleration of exercisability, vesting and/or payment; and (iv) if all or substantially all of our outstanding shares of common stock are transferred in exchange for cash consideration in connection with such change of control: (A) upon written notice, provide that any outstanding stock options and stock appreciation rights are exercisable during a reasonable period of time immediately prior to the scheduled consummation of the event or such other reasonable period as determined by the Plan Administrator (contingent upon the consummation of the event), and at the end

of such period, such stock options and stock appreciation rights will terminate to the extent not so exercised within the relevant period; and (B) cancel all or any portion of outstanding awards for fair value, as determined in the sole discretion of the Plan Administrator.

Substitute Awards in Corporate Transactions

The Plan Administrator may grant awards under the 2017 Plan to employees or directors of corporations that are acquired by us in substitution of awards previously granted by such corporations to such persons. Any such substitute awards shall not reduce the share reserve; provided, however, that such treatment is permitted by applicable law and the listing requirements of the NASDAQ or other exchange or securities market on which the common stock is listed.

Forfeiture / Right of Recapture

The Plan Administrator may specify in an award agreement that an award will be subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of certain specified events, including termination of service for "cause" (as defined in the 2017 Plan) or a participant's violation of any continuing obligation or duty of the participant in respect of the Company.

If within one year (or such longer time specified in an award agreement or other agreement or policy applicable to a participant) after the date on which a participant exercises a stock option or stock appreciation right or on which a stock award, restricted stock award or restricted stock unit vests or becomes payable or on which a cash performance award is paid to a participant, or on which income otherwise is realized by a participant in connection with an Award, either (i) a participant is terminated for cause, (ii) the Plan Administrator determines in its discretion that the participant is subject to any recoupment of benefits pursuant to our compensation recovery policy, "clawback" or similar policy, as may be in effect from time to time, or (iii) after a participant is terminated for any other reason, the Plan Administrator determines in its discretion either that, (A) during the participant's period of service, the participant engaged in an act or omission which would have warranted termination of service for "cause" and a forfeiture event has occurred with respect to the participant or (B) after termination, the participant engaged in conduct that materially violated any continuing obligation or duty of the participant in respect of us or any of our subsidiaries, then, at the sole discretion of the Plan Administrator, any gain realized by the participant from the exercise, vesting, payment or other realization of income by the participant in connection with an award, will be paid by the participant to us upon notice from us, subject to applicable state law.

Participants may be subject to our compensation recovery policy, "clawback" or similar policy, as may be in effect from time to time and/or any compensation recovery, "clawback" or similar policy made applicable by law including the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Awards to Non U.S. Participants

To comply with the laws in countries other than the United States in which we or any of our subsidiaries or affiliates operates or has employees, non-employee directors or consultants, the Plan Administrator, in its sole discretion, has the power and authority to (i) modify the terms and conditions of any award granted to participants outside the United States to comply with applicable foreign laws, (ii) take any action, before or after an award is made, that it deems advisable to obtain approval or comply with any necessary local government regulatory exemptions or approvals and (iii) establish subplans and modify exercise procedures and other terms and procedures, to the extent such actions may be necessary or advisable.

We will adopt an addendum to the 2017 Plan applicable to participants who are non U.S. residents which may include terms that vary from the terms described in this summary.

Term, Amendment and Termination

The term of the 2017 Plan is ten years from the date it is approved by the stockholders. Our Board may amend, modify, suspend or terminate the 2017 Plan at any time, provided, however, that no termination or amendment of the 2017 Plan will materially and adversely affect any award granted under the 2017 Plan without the consent of the participant or the permitted transferee of the award. Our Board may seek the approval of any amendment by our stockholders to the extent it deems necessary for purposes of compliance with Section 162(m) or Section 422 of the Internal Revenue Code, the listing requirements of the NASDAQ, or for any other purpose. Notwithstanding the foregoing, our Board shall have broad authority to amend the 2017 Plan and any award without the consent of a participant to the extent it deems necessary or desirable in its discretion to comply with, take into account changes in, or interpretation of, applicable tax laws, securities laws, employment laws, accounting rules and other applicable laws, rules and regulations.

Anticipated Awards in Connection with this Offering

In connection with this offering, we expect to grant an aggregate of 59,090 restricted stock units to members of our Board, who will receive the following grants:

Name	Number of Restricted Stock Units
Michael McShane	10,606
John Deane	7,576
Matthew Fitzgerald	13,636
W. Matt Ralls	13,636
Franklin Myers	13,636

The amount of restricted stock units shown in the table above includes annual grants to be made to members of our Board as well as initial grants made to each of Mr. Fitzgerald, Mr. Ralls and Mr. Myers in connection with their election to our Board.

PRINCIPAL AND SELLING STOCKHOLDERS

The following table shows information as of March 31, 2017 regarding the beneficial ownership of our common stock (1) immediately following the 3.00 for 1.00 stock split of our common stock that occurred on April 13, 2017 and (2) as adjusted to give effect to this offering by:

- each person or group who is known by us to own beneficially more than 5% of our common stock;
- each member of our Board and each of our named executive officers;
- all members of our Board and our executive officers as a group; and
- each selling stockholder.

Beneficial ownership of shares is determined under rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power. Except as noted by footnote, and subject to community property laws where applicable, we believe based on the information provided to us that the persons and entities named in the table below have sole voting and investment power with respect to all shares of our common stock shown as beneficially owned by them. Percentage of beneficial ownership is based on 34,005,978 shares of common stock outstanding as of March 31, 2017 after giving effect to the 3.00 for 1.00 stock split of our common stock that occurred on April 13, 2017, and 43,505,978 shares of common stock outstanding after giving effect to this offering. Shares of common stock subject to options currently exercisable or exercisable within 60 days of the date of this prospectus are deemed to be outstanding and beneficially owned by the person holding the options for the purposes of computing the percentage of beneficial ownership of that person and any group of which that person is a member, but are not deemed outstanding for the purpose of computing the percentage of beneficial ownership for any other person. Except as otherwise indicated, the persons named in the table below have sole voting and investment power with respect to all shares of capital stock held by them. The table does not reflect any shares of common stock that directors may purchase in this offering through the directed share program described under "Underwriting (Conflicts of Interest)." Unless otherwise indicated, the address for each holder listed below is 19450 State Highway 249, Suite 200, Houston, TX 77070.

	Shares of common stock beneficially owned before this offering		Shares of common stock beneficially owned after this offering (assuming no exercise of the option to purchase additional shares)		Number of shares of common stock being offered assuming full exercise of the option to purchase additional shares		Shares of common stock beneficially owned after this offering assuming full exercise of the option to purchase additional shares	
Name and address of beneficial owner	**Number of shares**	**Percentage of shares**	**Number of shares**	**Percentage of shares**	**Number of shares**	**% of shares**	**Number of shares**	**Percentage of shares**
5% stockholders:								
Advent Funds(1)	30,943,536	91.0%	30,943,536	71.1%	1,375,000	4.4%	29,597,677	65.9%
Cemblend(2)	1,819,247	5.1%	1,819,247	4.0%	50,000	2.7%	1,769,247	3.8%
Named executive officers and directors:								
Robert Nipper(3)	2,089,617	6.1%	2,089,617	4.4%	—	—	2,089,617	4.4%
Tim Willems	605,172	1.8%	605,172	1.4%	—	—	605,172	1.4%
Wade Bitter(4)	68,091	*	68,091	*	—	—	68,091	*
Marty Stromquist(5)	1,232,102	3.5%	1,232,102	2.8%	25,000	2.0%	1,207,102	2.6%
John Deane(6)	380,997	1.1%	380,997	*	—	—	380,997	*
Gurinder Grewal(7)	—	—	—	—	—	—	—	—
Matthew Fitzgerald	—	—	—	—	—	—	—	—
David McKenna(8)	—	—	—	—	—	—	—	—
Michael McShane	266,364	*	266,364	*	—	—	266,364	*
Franklin Myers	—	—	—	—	—	—	—	—
W. Matt Ralls	—	—	—	—	—	—	—	—
All Board members and executive officers as a group (12 persons)	4,688,399	13.1%	4,688,399	10.3%	—	—	4,663,399	10.0%

* Represents beneficial ownership of less than 1% of our outstanding common stock.

(1) Consists of 3,864,846 shares indirectly owned by Advent International GPE VII Limited Partnership, 3,577,074 shares indirectly owned by Advent International GPE VII-A Limited Partnership, 8,989,098 shares indirectly owned by Advent International GPE VII-B Limited Partnership, 2,856,087 shares indirectly owned by Advent International GPE VII-C Limited Partnership, 2,314,575 shares indirectly owned by Advent International GPE VII-D Limited Partnership 6,476,481 shares indirectly owned by Advent International GPE VII-E Limited Partnership, 835,476 shares indirectly owned by Advent International GPE VII-F Limited Partnership, 835,476 shares indirectly owned by Advent International GPE VII-G Limited Partnership, 504,381 shares indirectly owned by Advent International GPE VII-H Limited Partnership, 12,378 shares indirectly owned by Advent Partners GPE VII Limited Partnership, 30,945 shares indirectly owned by Advent Partners GPE VII-A Limited Partnership, 303,246 shares indirectly owned by Advent Partners GPE VII-B Cayman Limited Partnership, 272,304 shares indirectly owned by Advent Partners GPE VII Cayman Limited Partnership and 71,169 shares indirectly owned by Advent Partners GPE VII-A Cayman Limited Partnership. Advent-NCS Acquisition L.P. directly owns 30,943,536 shares. The general partner of Advent-NCS Acquisition L.P. is Advent-NCS GP LLC. Advent International GPE VII Limited Partnership, Advent International GPE VII-A Limited Partnership, Advent International GPE VII-B Limited Partnership, Advent International GPE VII-C Limited Partnership, Advent International GPE VII-D Limited Partnership, Advent International GPE VII-E Limited Partnership, Advent International GPE VII-F Limited Partnership, Advent International GPE VII-G Limited Partnership, Advent International GPE VII-H Limited Partnership, Advent Partners GPE VII Limited Partnership, Advent Partners GPE VII-A Limited Partnership, Advent Partners GPE VII-B Cayman Limited Partnership, Advent Partners GPE VII Cayman Limited Partnership and Advent Partners GPE VII-A Cayman Limited Partnership collectively own 100% of Advent-NCS Acquisition L.P. in pro rata proportion to the number of shares above disclosed as owned by each fund.

Advent is the manager of Advent International GPE VII LLC, which is the general partner of Advent Partners GPE VII Limited Partnership, Advent Partners GPE VII-A Limited Partnership, Advent Partners GPE VII Cayman Limited Partnership, Advent Partners GPE VII-A Cayman Limited Partnership, Advent Partners GPE VII-B Cayman Limited Partnership; and, GPE VII GP Limited Partnership, General Partner which in turn is the limited partner of Advent International GPE VII-A Limited Partnership, Advent International GPE VII-E Limited Partnership and Advent International GPE VII-H Limited Partnership; and GPE VII GP (Delaware) Limited Partnership, General Partner which in turn is the general partner of Advent International GPE VII Limited Partnership, Advent International GPE VII-B Limited Partnership, Advent International GPE VII-C Limited Partnership, Advent International GPE VII-D Limited Partnership, Advent International GPE VII-F Limited Partnership and Advent International GPE VII-G Limited Partnership. Advent exercises voting and investment power over the shares held by each of these entities and may be deemed to have beneficial ownership of these shares. With respect to the shares held by the Advent Funds, a number of individuals currently composed of David M. McKenna, David M. Mussafer and Steven M. Tadler, none of whom have individual voting or investment power, exercise voting and investment power over the shares beneficially owned by Advent. The address of Advent and each of the funds and other entities listed above is c/o Advent International Corporation, 75 State Street, Floor 29, Boston, MA 02109.

(2) Includes 909,623 shares held by Mr. Stromquist as a 50% owner of Cemblend.

(3) Consists of 185,250 shares held by Mr. Nipper individually and 1,904,367 shares held by Nipper Family Limited Partnership (the “Nipper Family Partnership”). Mr. Nipper exercises sole voting and investment power over the shares beneficially owned by the Nipper Family Partnership.

(4) Consists of 58,971 shares held by the Wade C. Bitter and Susan L. Bitter Revocable 2013 Trust. Wade and Susan Bitter share voting and investment power over the shares beneficially owned by the Wade C. Bitter and Susan L. Bitter Revocable 2013 Trust.

(5) Consists of 322,479 shares held by Mr. Stromquist individually and 909,623 shares held by Mr. Stromquist as a 50% owner of Cemblend.

(6) Consists of 380,997 shares held by the Deane Family Partnership Limited. Mr. Deane holds sole voting and investment power over the shares beneficially owned by the Deane Family Partnership Limited.

(7) Mr. Grewal holds no shares directly. Mr. Grewal is a managing director at Advent, which manages funds that collectively own 30,943,536 shares. See footnote (1) above. The address of Mr. Grewal is c/o Advent International Corporation, 75 State Street, Floor 29, Boston, MA 02109.

(8) Mr. McKenna holds no shares directly. Mr. McKenna is a managing partner at Advent, which manages funds that collectively own 30,943,536 shares. See footnote (1) above. Mr. McKenna's address is c/o Advent International Corporation, 75 State Street, Floor 29, Boston, MA 02109.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Set forth below is a description of certain relationships and related person transactions between us or our subsidiaries and our directors, executive officers or holders of more than 5% of our voting securities.

Stockholders Agreement

On December 20, 2012, we entered into a stockholders agreement with the Advent Funds, Nipper Corporate Holdings, LLC, SKPT Holdings, LLC, Robert Key and Cemblend Systems, Inc., a holding company jointly owned by Mr. Stromquist and Mr. Getzlaf ("Cemblend"), and a stockholder of HoldCo, which was subsequently amended on April 1, 2013 (the "Stockholders Agreement"). The Stockholders Agreement contains provisions relating to the election of directors, stock transfer restrictions with respect to stock held by non-Advent stockholders, drag-along rights in favor of Advent and tag-along rights, preemptive rights, our right to repurchase stock from non-Advent stockholders upon termination of employment and noncompetition, nonsolicitation and confidentiality restrictions for non-Advent stockholders. The Stockholders Agreement will be terminated upon consummation of this offering and will be replaced by the provisions of the Registration Rights Agreement described below.

Registration Rights Agreement

In connection with this offering, we intend to enter into a registration rights agreement that will provide the Advent Funds an unlimited number of "demand" registrations and customary "piggyback" registration rights, and will provide certain members of our management with customary "piggyback" registration rights. The registration rights agreement will also provide that we will pay certain expenses relating to such registrations and indemnify the registration rights holders against certain liabilities which may arise under the Securities Act.

Dividend

On August 7, 2014, we paid a cash dividend of approximately $150.0 million ("2014 Dividend") which included two components, (i) $146.9 million related to declared dividends and (ii) $3.1 million related to dividends treated as compensation. Pursuant to the 2014 Dividend (i) each holder of our common stock received $4.65 for each share of common stock held by such stockholder and (ii) each holder of options issued under the NCS Energy Holdings, LLC 2011 Equity Incentive Plan received $4.65 for each option held by such option holder, as applicable. Options issued prior to such date pursuant to our 2012 Equity Incentive Plan were adjusted by reducing the per share strike price by $4.65. The following directors, executive officers and holders of more than 5% of our common stock received the dividend payments listed below:

Directors, Executive Officers and 5% Stockholders	Total Dividend Received
Advent Funds	$ 125,854,448
Robert Nipper(1)	8,611,095
Marty Stromquist(2)	5,357,265
Don Getzlaf(3)	5,357,265
Tim Willems(4)	2,449,707
John Deane	883,185
Michael McShane	220,793
Wade Bitter(5)	212,565
John Ravensbergen	27,569

(1) Consists of $861,110 received by Mr. Nipper individually and $7,749,985 received by Nipper Family Partnership.
(2) Consists of $1,129,009 received by Mr. Stromquist individually and $4,228,256 received by Mr. Stromquist as a 50% owner of Cemblend.

(3) Consists of $1,129,009 received by Mr. Getzlaf individually and $4,228,256 received by Mr. Getzlaf as a 50% owner of Cemblend.
(4) Consists of $556,004 received by Mr. Willems individually and $1,893,701 received by Willems Family Limited Partnership.
(5) Consists of $212,565 received by the Wade C. Bitter and Susan L. Bitter Revocable 2013 Trust.

Cemblend Transactions

In connection with Advent's acquisition of HoldCo in 2012, we entered into an exchange agreement with Cemblend, HoldCo and NCS Multistage Inc. (formerly known as NCS Oilfield Services Canada, Inc.) ("Exchangeco"), dated December 20, 2012 (the "Exchange Agreement"). Pursuant to the Exchange Agreement, we exchanged Cemblend's exchangeable shares, which were exchangeable for common units of HoldCo, for 1,819,247 shares of Exchangeco which are exchangeable on a one-to-one basis for shares of our common stock.

In connection with the 2014 Dividend, we provided a loan in the amount of approximately $750,000 to Cemblend for the payment of withholding taxes payable by Cemblend as a result of the 2014 Dividend. Cemblend repaid the loan in February 2017.

From time to time we purchase services and a grease product produced by Cemblend to use with our products and services. Payments to Cemblend for the services and grease totaled approximately $49,000 and $59,000 for the fiscal years ending December 31, 2016 and 2015, respectively.

Subscription Agreement

In December 2015, we entered into a subscription agreement with the Advent Funds pursuant to which the Advent Funds purchased an aggregate of 3,868,539 shares of our common stock for an aggregate purchase price of $36,957,442, or approximately $9.55 per share. In connection with the purchase by the Advent Funds, certain other parties to the Stockholders Agreement exercised their preemptive rights and purchased additional shares. In addition, the offering was extended to all option holders. The following directors, executive officers and holders of more than 5% of our common stock purchased the number of shares listed below at a purchase price of $9.55 per share:

Directors, Executive Officers and 5% Stockholders	Shares Purchased
Advent Funds	3,868,539
Robert Nipper(1)	104,676
Ryan Hummer	8,250
Wade Bitter(2)	10,500
Tim Willems(3)	41,868
John Ravensbergen	5,100
Dustin Ellis	2,094
Mike McKown	600
Dave Anderson	11,445
John Deane(4)	24,633
Michael McShane	52,500

(1) Consists of 104,676 purchased by Nipper Family Partnership.
(2) Consists of 10,500 purchased by Wade C. Bitter and Susan L. Bitter Revocable 2013 Trust.
(3) Consists of 41,868 purchased by Willems Family LP.
(4) Consists of 24,633 purchased by Deane Family Partnership Limited.

Board Compensation

Our directors who are our employees, employees of our subsidiaries or employees of Advent will receive no compensation for their service as members of our Board, except as limited to expense reimbursement. Our other directors will receive compensation for their service as members of our Board.

Employment Agreements

We have entered into an employment agreement with each of our NEOs as well as other executive officers.

Indemnification Agreements

We intend to enter into indemnification agreements with each of our directors prior to the completion of this offering. The indemnification agreements will provide the directors with contractual rights to indemnification, expense advancement and reimbursement, to the fullest extent permitted under the DGCL, subject to certain exceptions contained in those agreements.

Policies for Approval of Related Person Transactions

In connection with this offering, we will adopt a written policy relating to the approval of related person transactions. A “related person transaction” is a transaction or arrangement or series of transactions or arrangements in which we participate (whether or not we are a party) and a related person has a direct or indirect material interest in such transaction. Our audit committee will review and approve or ratify all relationships and related person transactions between us and (i) our directors, director nominees or executive officers, (ii) any 5% record or beneficial owner of our common stock or (iii) any immediate family member of any person specified in (i), (ii) and (iii) above.

As set forth in the related person transaction policy, in the course of its review and approval or ratification of a related party transaction, the audit committee will, in its judgment, consider in light of the relevant facts and circumstances whether the transaction is, or is not inconsistent with, our best interests, including consideration of various factors enumerated in the policy.

Any member of the audit committee who is a related person with respect to a transaction under review will not be permitted to participate in the discussions or approval or ratification of the transaction. However, such member of the audit committee will provide all material information concerning the transaction to the audit committee. Our policy also includes certain exceptions for transactions that need not be reported and provides the audit committee with the discretion to pre-approve certain transactions.

DESCRIPTION OF MATERIAL INDEBTEDNESS

Secured Credit Facilities

On August 7, 2014, Pioneer Investment, Inc., a wholly owned indirect subsidiary of the company (the "Borrower"), Pioneer Intermediate, Inc., a wholly owned direct subsidiary of the company (the "Parent Guarantor") and certain of their subsidiaries entered into senior secured credit facilities (the "Senior Secured Credit Facilities") arranged by Wells Fargo Securities, LLC, HSBC Bank Canada and Citibank, N.A. The Senior Secured Credit Facilities consist of a term loan in the original principal amount of $197,640,000 CAD (the "Term Loan") and a $38,430,000 CAD revolving credit facility (the "Revolving Credit Facility"), of which $5,000,000 CAD may be made available for letters of credit and $10,000,000 CAD may be made available for swingline loans. The Senior Secured Credit Facilities were amended on April 15, 2015 (the "First Amendment") to, among other things, amend certain of the financial covenants described below. The Senior Secured Credit Facilities were further amended on December 22, 2015 (the "Second Amendment") to, among other things, further amend certain of the financial covenants described below, to evidence the prepayment of the Term Loan in an amount of $55,784,000 CAD and the reduction of the commitments under the Revolving Credit Facility from $38,430,000 CAD to $27,800,000 CAD and to reduce the amount available for swingline loans under the Revolving Credit Facility from $10,000,000 CAD to $5,000,000 CAD. The description of the Senior Secured Credit Facilities below gives effect to the First Amendment and Second Amendment thereto. We intend to terminate the Senior Secured Credit Facilities in connection with this offering and enter into a new revolving credit facility.

Interest Rate and Fees

Borrowings under the Senior Secured Credit Facilities bear interest at a rate per annum equal to the applicable margin plus a base rate determined by reference to the highest of either: (a) in the case of loans denominated in U.S. dollars, at our election, either (i) (A) the federal funds rate plus 0.5%, (B) one-month LIBOR plus 1.00% and (C) the prime commercial lending rate of the administrative agent as in effect on the relevant day or (ii) the LIBOR rate determined by reference to the applicable Reuters screen two business days prior to the commencement of the interest period relevant to the subject borrowing or (b) in the case of loans denominated in Canadian dollars, at our election, either (i)(A) the prime commercial lending rate of the administrative agent as in effect on the relevant day for determining interest rates on Canadian dollar denominated commercial loans made in Canada and (B) CDOR plus 1.0% or (ii) the CDOR rate determined by reference to the applicable Reuters screen page for a term equal to the interest period or contract period relevant to the subject borrowing.

The applicable margin for loans under the Senior Secured Credit Facilities is determined in accordance with the table set forth below, with the leverage ratio determined in accordance with the terms of the documentation governing the Senior Secured Credit Facilities:

Leverage Ratio	Applicable Margin for Eurocurrency / B/A Advances	Applicable Margin for Base Rate Loans
Less than 1.50:1.00	3.25%	2.25%
Equal to or greater than 1.50:1.00 but less than 2.00:1.00	3.50%	2.50%
Equal to or greater than 2.00:1.00 but less than 2.50:1.00	3.75%	2.75%
Greater than or equal to 2.50:1.00 but less than 3.00:1.00	4.00%	3.00%
Greater than or equal to 3.00:1.00 but less than 3.50:1.00	4.25%	3.25%
Greater than or equal to 3.50:1.00 but less than 4.00:1.00	4.50%	3.50%
Greater than or equal to 4.00:1.00	4.75%	3.75%

The following fees are required to be paid under the Senior Secured Credit Facilities:

- a commitment fee to each revolving lender on the average daily unused portion of such revolving lender's revolving credit commitment of 0.25% per annum when the leverage ratio is less than 1.50 to 1.00,

0.375% when the leverage ratio is equal to or greater than 1.50 to 1.00 but less than 2.00 to 1.00, 0.50% when the leverage ratio is equal to or greater than 2.00 to 1.00 but less than 3.50 to 1.00 and 0.65% when the leverage ratio is greater than or equal to 3.50 to 1.00;

- a participation fee to each revolving lender on the daily face amount of such revolving lender's letter of credit exposure at a rate equal to the greater of (i) the applicable margin for LIBOR loans under the revolving credit facility and (ii) $600 CAD per letter of credit (or $600 per letter of credit denominated in U.S. dollars);
- an annual fronting fee to each issuing lender equal to the greater of (i) 0.20% per annum on the face amount of such letter of credit and (ii) $600 CAD per annum (or $600 per annum for letters of credit denominated in U.S. dollars); and
- a customary annual administration fee to the administrative agent.

Voluntary Prepayments

Subject to certain notice requirements, the Borrower may voluntarily prepay outstanding loans under the Senior Secured Credit Facilities in whole or in part without premium or penalty other than customary "breakage" costs with respect to Eurocurrency Advances.

Mandatory Prepayments

The documentation governing the Senior Secured Credit Facilities requires us to prepay the Term Loan outstanding thereunder:

- if the Leverage Ratio is greater than 2.00 to 1.00 at December 31 of any year (as determined based upon the annual financial statements of the Parent Guarantor), with 50% of excess cash flow for such year (as determined in accordance with the terms of the documentation governing the Senior Secured Credit Facilities) for each fiscal year, minus, at the option of the Borrower, the amount of any voluntary prepayment under the Senior Secured Credit Facilities (in the case of any voluntary prepayment of revolving loans under the Senior Secured Credit Facilities, to the extent accompanied by a permanent reduction of the related commitment);
- with 100% of the net cash proceeds of certain asset sales above a threshold amount and/or insurance/condemnation events, subject to reinvestment rights and other exceptions;
- with 100% of the net cash proceeds of any issuance or incurrence of debt that is not permitted by the terms of the documentation governing the Senior Secured Credit Facilities; and
- with the proceeds of any equity contribution made to cure a breach of any financial covenant

Final Maturity and Amortization

The Term Loan and the Revolving Credit Facility under the Senior Secured Credit Facilities will mature on August 7, 2019.

The Borrower is required to make quarterly amortization payments in respect of the Term Loan under the Senior Secured Credit Facilities in an amount equal to (i) 2.50% of the original principal amount thereof for each fiscal quarter ending prior to December 31, 2016, (ii) 3.75% of the original principal amount thereof for each fiscal quarter ending on or after December 31, 2016 and prior to December 31, 2018 and (iii) an amount equal to 5.00% of the original principal amount thereof for each fiscal quarter ending on or after December 31, 2018. A prepayment of $55,784,000 CAD made in connection with the Second Amendment was applied to reduce the amortization payments due for the quarters ending December 31, 2015, March 31, 2016, June 30, 2016, September 30, 2016, December 31, 2016, March 31, 2017, June 30, 2017, September 30, 2017 and, to the extent of any remaining amount of the prepayment, December 31, 2017 and any fiscal quarter thereafter.

Borrowers and Guarantors

Pioneer Investment, Inc. is the borrower under the Senior Secured Credit Facilities.

The obligations of the Borrower under the Senior Secured Credit Facilities are guaranteed by the Parent Guarantor and each wholly-owned domestic subsidiary of the Borrower, subject to certain exceptions.

Security

The obligations under the Senior Secured Credit Facilities are secured by first priority security interests in substantially all of the assets of the Borrower and the guarantors, subject to permitted liens and other exceptions, a pledge of all capital stock of the Borrower and each guarantor, a pledge of all of the capital stock of NCS Multistage, Inc. and the pledge of 65% of the capital stock of other foreign subsidiaries, subject to customary exclusions.

Certain Covenants, Representations and Warranties

The agreements governing the Senior Secured Credit Facilities contain customary representations and warranties, affirmative covenants (including reporting obligations) and negative covenants. With respect to the negative covenants, these restrictions include, among other things and subject to certain exceptions, restrictions on the ability of the Borrower and its subsidiaries' ability to:

- incur additional indebtedness;
- grant liens;
- enter into burdensome agreements with negative pledge clauses or restrictions on subsidiary distributions;
- make certain investments;
- pay dividends;
- make payments in respect of junior lien or subordinated debt;
- make acquisitions;
- consolidate, amalgamate, merge, liquidate or dissolve;
- sell, transfer or otherwise dispose of assets;
- make certain organizational changes (including with respect to organizational documents and changes in fiscal year);
- engage in sale-leaseback transactions;
- engage in transactions with affiliates;
- enter into operating leases;
- enter into hedging arrangements;
- enter into certain leasehold arrangements and arrangements with respect to inventory and equipment;
- materially alter the business of the Borrower and its restricted subsidiaries; and
- incur capital expenditures.

Financial Covenants

The Senior Secured Credit Facilities contain financial covenants that require (i) commencing with the fiscal quarter ended March 31, 2019, compliance with a leverage ratio test set at 3.00 to 1.00 as of the last day of each

fiscal quarter, (ii) commencing with the fiscal quarter ended March 31, 2019, compliance with a fixed charge coverage ratio test set at 1.25 to 1.00 as of the last day of each fiscal quarter and (iii) commencing with the fiscal quarter ended December 31, 2015, compliance with an interest coverage ratio set at (x) 1.50 to 1.00 as of the last day of each fiscal quarter through and including the fiscal quarter ended December 31, 2017 and (y) 1.75 to 1.00 as of the last day of the fiscal quarter ended March 31, 2018 through and including the fiscal quarter ending December 31, 2018.

In the event that the Borrower fails to comply with the covenants relating to the leverage ratio and interest coverage ratio, the Parent Guarantor may issue equity or certain parent companies of the Parent Guarantor may contribute cash equity to the Parent Guarantor in order to increase EBITDA for purposes of calculating and determining compliance with the financial covenants, subject to certain limitations.

Events of Default

The lenders under Senior Secured Credit Facilities are permitted under certain circumstances to accelerate the loans and terminate commitments thereunder and exercise other remedies upon the occurrence of certain customary events of default, subject to grace periods, thresholds and exceptions. These events of default include, among others, payment defaults, cross-defaults to certain material indebtedness, covenant defaults, material inaccuracy of representations and warranties, bankruptcy events, material judgments, certain ERISA-related events, material defects with respect to guarantees and collateral and change of control.

New Senior Secured Credit Facility

Concurrently with the closing of this offering, the Borrower, NCS Multistage, Inc., a wholly owned indirect subsidiary of the Company (the “Canadian Borrower” and together with the Borrower, the “Borrowers”), the Parent Guarantor and the Company (together with the Parent Guarantor, the “Parent Guarantors”) intends to enter into an Amended and Restated Credit Agreement (the “Credit Agreement”) with the lenders party thereto, Wells Fargo Bank, National Association and Wells Fargo Bank, National Association, Canadian Branch, as administrative agents and the other parties thereto (the facilities provided thereunder, the “New Senior Secured Credit Facility”). The final terms of the Credit Agreement may not be determined until shortly before completion of this offering and may differ from those described below.

The New Senior Secured Credit Facility consists of (i) a revolving credit facility in an aggregate principal amount of $25,000,000 made available to the Borrower (the “U.S. Facility”), of which up to $5,000,000 may be made available for letters of credit and up to $5,000,000 may be made available for swingline loans and (ii) a revolving credit facility in an aggregate principal amount of $25,000,000 made available to the Canadian Borrower (the “Canadian Facility”). The Credit Agreement will amend and restate that certain Credit Agreement, dated as of August 7, 2014, among the U.S. Borrower, Pioneer Intermediate, Wells Fargo Bank, National Association and the lenders party thereto.

Interest Rate and Fees

Borrowings under the New Senior Secured Credit Facility (other than swingline loans) may, at our election, bear interest at a rate per annum equal to the applicable margin plus either (i) the base rate or (ii) the LIBOR rate. The base rate is determined by reference to the highest of (i) in the case of loans that are denominated in U.S. dollars, (A) the federal funds rate plus 0.5%, (B) one-month LIBOR plus 1.00% and (C) the prime commercial lending rate of the U.S. administrative agent as in effect on the relevant day (the “U.S. Base Rate”) and (ii) in the case of loans that are denominated in Canadian dollars, (A) the prime commercial lending rate of the Canadian administrative agent as in effect on the relevant day for determining interest rates on Canadian dollar denominated commercial loans made in Canada and (B) CDOR plus 1.0%. The LIBOR rate is (i) in the case of loans that are denominated in U.S. Dollars or Euros, determined by reference to the applicable Reuters screen two business days prior to the commencement of the interest period relevant to the subject borrowing and (ii) in

the case of loans that are denominated in Canadian dollars, CDOR determined by reference to the applicable Reuters screen two business days prior to the commencement of the interest period relevant to the subject borrowing. Swingline loans bear interest at the U.S. Base Rate plus the applicable margin.

The applicable margin for loans under the New Senior Secured Credit Facility is determined in accordance with the table set forth below, with the leverage ratio determined in accordance with the terms of the Credit Agreement:

Leverage Ratio	Applicable Margin for Eurocurrency / B/A Advances	Applicable Margin for Base Rate Loans
Less than 1.50:1.00	3.25%	2.25%
Equal to or greater than 1.50:1.00 but less than 2.00:1.00	3.50%	2.50%
Equal to or greater than 2.00:1.00 but less than 2.50:1.00	3.75%	2.75%
Greater than or equal to 2.50:1.00	4.00%	3.00%

The following fees will be required to be paid under the Credit Agreement:

- a commitment fee to each revolving lender on the average daily unused portion of such revolving lender's revolving credit commitment of 0.375% per annum when the leverage ratio is less than 2.00 to 1.00 and 0.50% when the leverage ratio is greater than or equal to 2.00 to 1.00;
- a participation fee to each revolving lender on the daily face amount of such revolving lender's letter of credit exposure at a rate equal to the applicable margin for LIBOR loans;
- an annual fronting fee to each issuing lender equal to the greater of (i) 0.20% per annum on the face amount of such letter of credit and (ii) $600; and
- a customary annual administration fee to the administrative agent.

Voluntary Prepayments

Subject to certain notice requirements, the Borrowers may voluntarily prepay outstanding loans under the New Senior Secured Credit Facility in whole or in part without premium or penalty other than customary "breakage" costs with respect to Eurocurrency Advances.

Final Maturity

The New Senior Secured Credit Facility will mature three years from the closing date of the Credit Agreement.

Guarantors and Security

The obligations of the Borrower under the New Senior Secured Credit Facility will be guaranteed by and secured by substantially all of the assets of the Parent Guarantors and each wholly-owned restricted subsidiary of the company organized under the laws of the US (subject to certain exceptions and permitted liens) ("U.S. Guarantors"). The obligations of the Canadian Borrower under the New Senior Secured Credit Facility will be guaranteed by and secured by substantially all of the assets of each wholly-owned restricted subsidiary of the Company organized under the laws of Canada and the U.S. Guarantors (subject to certain exceptions and permitted liens) ("Canadian Guarantors").

Certain Covenants, Representations and Warranties

The Credit Agreement shall contain customary representations and warranties, affirmative covenants (including reporting obligations) and negative covenants. With respect to the negative covenants, these

restrictions include, among other things and subject to certain exceptions, restrictions on the ability of the Borrowers and their respective subsidiaries' ability to:

- incur additional indebtedness;
- grant liens;
- enter into burdensome agreements with negative pledge clauses or restrictions on subsidiary distributions;
- make certain investments;
- pay dividends;
- make payments in respect of junior lien or subordinated debt;
- make acquisitions;
- consolidate, amalgamate, merge, liquidate or dissolve;
- sell, transfer or otherwise dispose of assets;
- make certain organizational changes (including with respect to organizational documents and changes in fiscal year);
- engage in sale-leaseback transactions;
- engage in transactions with affiliates;
- enter into operating leases;
- enter into hedging arrangements;
- enter into certain leasehold arrangements and arrangements with respect to inventory and equipment;
- materially alter the business of the Borrowers and their respective restricted subsidiaries; and
- make capital expenditures.

Financial Covenants

The Credit Agreement will contain financial covenants that require (i) commencing with the fiscal quarter ending June 30, 2017, compliance with a leverage ratio test set at (A) 3.00 to 1.00 as of the last day of each fiscal quarter ending prior to March 31, 2018 and (B) 2.50 to 1:00 as of the last day of each fiscal quarter ending on or after March 31, 2018, (ii) commencing with the fiscal quarter ending June 30, 2017, compliance with an interest coverage ratio test set at 2.75 to 1.00 as of the last day of each fiscal quarter, (iii) if the leverage ratio as of the end of any fiscal quarter is greater than 2.00 to 1.00 and the amount outstanding under the Canadian Facility at any time during such fiscal quarter was greater than $0, compliance with a Canadian asset coverage ratio set at 1.00 to 1.00 and (iv) if the leverage ratio as of the end of any fiscal quarter is greater than 2.00 to 1.00 and the amount outstanding under the U.S. Facility at any time during such fiscal quarter was greater than $0, compliance with a U.S. asset coverage ratio set at 1.00 to 1.00.

Events of Default

The lenders under New Senior Secured Credit Facility will be permitted under certain circumstances to accelerate the loans and terminate commitments thereunder and exercise other remedies upon the occurrence of certain customary events of default, subject to grace periods, thresholds and exceptions. These events of default include, among others, payment defaults, cross-defaults to certain material indebtedness, covenant defaults, material inaccuracy of representations and warranties, bankruptcy events, material judgments, certain ERISA-related events, material defects with respect to guarantees and collateral and change of control.

DESCRIPTION OF CAPITAL STOCK

The following is a description of (i) the material terms of our amended and restated certificate of incorporation and amended and restated bylaws as they will be in effect upon the consummation of this offering and the related 3.00 for 1.00 stock split of our common stock that occurred on April 13, 2017 and (ii) certain applicable provisions of Delaware law. We refer you to our amended and restated certificate of incorporation and amended and restated bylaws, copies of which are filed as exhibits to the registration statement of which this prospectus is a part.

Authorized Capitalization

Our authorized capital stock shall consist of 225,000,000 shares of common stock, par value $0.01 per share and 10,000,000 shares of preferred stock, par value $0.01 per share. Following the consummation of this offering, 45,325,225 shares of common stock and 1 share of preferred stock shall be issued and outstanding. As of April 14, 2017, there were approximately 25 holders of our common stock.

Common Stock

Holders of our common stock are entitled to the rights set forth below.

Voting Rights

Directors will be elected by a plurality of the votes entitled to be cast except as set forth below with respect to directors to be elected by the holders of common stock. Our stockholders will not have cumulative voting rights. Except as otherwise provided in our amended and restated certificate of incorporation or as required by law, all matters to be voted on by our stockholders other than matters relating to the election and removal of directors must be approved by a majority of the votes properly cast for or against such matter, and, for the avoidance of doubt, neither abstention nor broker non-votes shall be counted as votes cast for or against such matter or by a written resolution of the stockholders representing the number of affirmative votes required for such matter at a meeting.

Dividend Rights

Holders of common stock will share equally in any dividend declared by our Board, subject to the rights of the holders of any outstanding preferred stock.

Liquidation Rights

In the event of any voluntary or involuntary liquidation, dissolution, distribution of assets or winding up of our affairs, holders of our common stock would be entitled to share ratably in our assets that are legally available for distribution to stockholders after payment of liabilities. If we have any preferred stock outstanding at such time, holders of the preferred stock may be entitled to distribution and/or liquidation preferences. In either such case, we must pay the applicable distribution to the holders of our preferred stock before we may pay distributions to the holders of our common stock.

Registration Rights

Certain of our existing stockholders have certain registration rights with respect to our common stock pursuant to a registration rights agreement. See “Certain Relationships and Related Party Transactions— Registration Rights Agreement.”

Other Rights

Our stockholders have no preemptive or other rights to subscribe for additional shares. All holders of our common stock are entitled to share equally on a share-for-share basis in any assets available for distribution to common stockholders upon our liquidation, dissolution or winding up.

Preferred Stock

Our Board is authorized to provide for the issuance of preferred stock in one or more series and to fix the preferences, powers and relative, participating, optional or other special rights and qualifications, limitations or restrictions thereof, including the dividend rate, conversion rights, voting rights, redemption rights and liquidation preference and to fix the number of shares to be included in any such series without any further vote or action by our stockholders. Any preferred stock so issued may rank senior to our common stock with respect to the payment of dividends or amounts upon liquidation, dissolution or winding up, or both. In addition, any such shares of preferred stock may have class or series voting rights. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of our company without further action by the stockholders and may adversely affect the voting and other rights of the holders of our common stock.

Our Board has authorized the issuance of 1 share of preferred stock, par value $0.01 per share (the “Special Voting Share”) in our amended and restated certificate of incorporation. The Special Voting Share is currently issued and outstanding. The holder of the Special Voting Share is entitled to vote on all matters that a holder of our common stock is entitled to vote on and is entitled to cast a number of votes equal to the number of exchangeable shares of Exchangeco then outstanding that are not owned by the company, multiplied by the exchange ratio (as defined in Exchangeco’s articles of incorporation). As of December 31, 2016 and 2015, exchangeable shares of Exchangeco for our common stock totaled 1,819,247 and are held by the preferred stockholder. The holder of the Special Voting Share is not entitled to receive dividends.

Anti-takeover Provisions

Our amended and restated certificate of incorporation and amended and restated bylaws will contain provisions that delay, defer or discourage transactions involving an actual or potential change in control of us or change in our management. We expect that these provisions, which are summarized below, will discourage coercive takeover practices or inadequate takeover bids. These provisions will be designed to encourage persons seeking to acquire control of us to first negotiate with our Board, which we believe may result in an improvement of the terms of any such acquisition in favor of our stockholders. However, they will also give our Board the power to discourage transactions that some stockholders may favor, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Accordingly, these provisions could adversely affect the price of our common stock.

Requirements for Advance Notification of Stockholder Meetings, Nominations and Proposals

Our amended and restated bylaws will provide that special meetings of the stockholders may be called only upon the request of a majority of our Board or upon the request of the Chief Executive Officer. Our amended and restated bylaws will prohibit the conduct of any business at a special meeting other than as specified in the notice for such meeting. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers or changes in control or management of our company.

Our amended and restated bylaws will establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our Board or a committee of our Board. In order for any matter to be “properly brought” before a meeting, a stockholder will have to comply with the advance notice requirements of directors, which may be filled only by a vote of a majority of directors then in office, even though less than a quorum, and not by the

stockholders. Our amended and restated bylaws will allow the presiding officer at a meeting of the stockholders to adopt rules and regulations for the conduct of meetings which may have the effect of precluding the conduct of certain business at a meeting if the rules and regulations are not followed. These provisions may also defer, delay or discourage a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

No Stockholder Action by Written Consent

Our amended and restated certificate of incorporation will provide that, subject to the rights of any holders of preferred stock to act by written consent instead of a meeting, stockholder action may be taken only at an annual meeting or special meeting of stockholders and may not be taken by written consent instead of a meeting. Failure to satisfy any of the requirements for a stockholder meeting could delay, prevent or invalidate stockholder action.

Section 203 of the DGCL

Our amended and restated certificate of incorporation will provide that the provisions of Section 203 of the DGCL, which relate to business combinations with interested stockholders, do not apply to us. Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a business combination transaction with an interested stockholder (a stockholder who owns more than 15% of our common stock) for a period of three years after the interested stockholder became such unless the transaction fits within an applicable exemption, such as Board approval of the business combination or the transaction that resulted in such stockholder becoming an interested stockholder. These provisions will apply even if the business combination could be considered beneficial by some stockholders. Although we have elected to opt out of the statute's provisions, we could elect to be subject to Section 203 in the future.

Amendment to Bylaws and Certificate of Incorporation

Any amendment to our amended and restated certificate of incorporation must first be approved by a majority of our Board and (i) if required by law, thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment or (ii) if related to provisions regarding the classification of our Board, the removal of directors, director vacancies, forum selection for certain lawsuits, indemnification, corporate opportunities, business combinations, severability, the provision opting-out of Section 203 of the DGCL or the amendment of certain provisions of our amended and restated bylaws or amended and restated certificate of incorporation, thereafter be approved by at least 66 ⅔% of the outstanding shares entitled to vote on the amendment. For so long as the Advent Funds beneficially owns 50% or more of our issued and outstanding common stock entitled to vote generally in the election of directors, any amendment to provisions regarding Section 203 of the DGCL or corporate opportunities must also receive Advent's prior written consent. Our amended and restated bylaws may be amended (x) by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the bylaws, without further stockholder action or (y) by the affirmative vote of at least 66 ⅔% of the outstanding shares entitled to vote on the amendment, without further action by our Board.

Exclusive Forum

Our amended and restated certificate of incorporation will provide that, subject to certain exceptions, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for certain stockholder litigation matters. However, it is possible that a court could rule that this provision is unenforceable or inapplicable.

Listing

We have applied to have our common stock listed on NASDAQ under the symbol "NCSM."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock. Future sales of our common stock in the public market, or the perception that sales may occur, could materially adversely affect the prevailing market price of our common stock at such time and our ability to raise equity capital in the future.

Sale of Restricted Securities

Upon consummation of this offering, we will have 45,325,225 shares of our common stock outstanding. Of these shares, all shares sold in this offering (other than shares sold pursuant to our directed share program that are subject to "lock-up" restrictions as described under "Underwriting (Conflicts of Interest)—Directed Share Program") will be freely tradable without further restriction or registration under the Securities Act, except that any shares purchased by our affiliates may generally only be sold in compliance with Rule 144, which is described below. Of the remaining outstanding shares, 35,825,225 shares will be deemed "restricted securities" under the Securities Act.

Lock-Up Arrangements and Registration Rights

In connection with this offering, we, each of our executive officers, directors, the Advent Funds and certain of our other existing stockholders, will enter into lock-up agreements that restrict the sale of our securities for up to 180 days after the date of this prospectus (including any shares acquired pursuant to our directed share program), subject to certain exceptions. For additional information, see "Underwriting (Conflicts of Interest)."

In addition, following the expiration of the lock-up period, certain stockholders will have the right, subject to certain conditions, to require us to register the sale of their shares of our common stock under federal securities laws. See "Certain Relationships and Related Party Transactions—Registration Rights Agreement." If these stockholders exercise this right, our other existing stockholders may require us to register their registrable securities.

Following the lock-up periods described above, all of the shares of our common stock that are restricted securities or are held by our affiliates as of the date of this prospectus will be eligible for sale in the public market in compliance with Rule 144 under the Securities Act.

Rule 144

The shares of our common stock sold in this offering will generally be freely transferable without restriction or further registration under the Securities Act, except that any shares of our common stock held by an "affiliate" of ours may not be resold publicly except in compliance with the registration requirements of the Securities Act or under an exemption under Rule 144 or otherwise. Rule 144 permits our common stock that has been acquired by a person who is an affiliate of ours, or has been an affiliate of ours within the past three months, to be sold into the market in an amount that does not exceed, during any three-month period, the greater of:

- one percent of the total number of shares of our common stock outstanding; or
- the average weekly reported trading volume of our common stock for the four calendar weeks prior to the sale.

Such sales are also subject to specific manner of sale provisions, a six-month holding period requirement, notice requirements and the availability of current public information about us.

289,620 shares of our common stock that are not subject to lock-up arrangements described above will be eligible for sale under Rule 144 immediately upon the closing of this offering.

Rule 144 also provides that a person who is not deemed to have been an affiliate of ours at any time during the three months preceding a sale, and who has for at least six months beneficially owned shares of our common stock that are restricted securities, will be entitled to freely sell such shares of our common stock subject only to the availability of current public information regarding us. A person who is not deemed to have been an affiliate of ours at any time during the three months preceding a sale, and who has beneficially owned for at least one year shares of our common stock that are restricted securities, will be entitled to freely sell such shares of our common stock under Rule 144 without regard to the current public information requirements of Rule 144.

Rule 701

Rule 701 generally allows a stockholder who purchased shares of our capital stock pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days to sell these shares in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the date of this prospectus before selling those shares pursuant to Rule 701.

Additional Registration Statements

We intend to file a registration statement on Form S-8 under the Securities Act to register 7,645,071 shares of our common stock to be issued or reserved for issuance under our equity incentive plans. Such registration statement is expected to be filed soon after the date of this prospectus and will automatically become effective upon filing with the SEC. Accordingly, shares registered under such registration statement will be available for sale in the open market, unless such shares are subject to vesting restrictions with us or the lock-up restrictions described above.

MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following discussion summarizes the material U.S. federal income and estate tax consequences to "non-U.S. holders" of ownership and disposition of our common stock, but does not purport to provide a complete analysis of all potential U.S. federal income tax and estate tax considerations relating thereto.

A "non-U.S. holder" is a beneficial owner of our common stock that is, for U.S. federal income tax purposes:

- a non-resident alien individual;
- a foreign corporation; or
- a foreign estate or trust.

You are not a non-U.S. holder if you are a nonresident alien individual present in the United States for 183 days or more in the taxable year of disposition, or if you are a former citizen or former resident of the United States, in either of which cases you should consult your tax advisor regarding the U.S. federal income tax consequences of owning or disposing of our common stock.

If an entity or arrangement treated as a partnership or other type of pass-through entity for U.S. federal income tax purposes owns our common stock, the tax treatment of a partner or beneficial owner of the entity may depend upon the status of the partner or beneficial owner, the activities of the entity and certain determinations made at the partner or beneficial owner level. Partners and beneficial owners in partnerships or other pass-through entities that own our common stock should consult their own tax advisors as to the particular U.S. federal income and estate tax consequences applicable to them.

This discussion is based on the Internal Revenue Code of 1986, as amended, final, temporary and proposed Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, all as in effect on the date hereof, and all of which are subject to change or differing interpretations, possibly with retroactive effect, which may affect the tax consequences described herein. This discussion does not address all aspects of U.S. federal income (including the alternative minimum tax) and estate taxation that may be relevant to non-U.S. holders in light of their particular circumstances and does not address any tax consequences arising under the laws of any state, local or foreign jurisdiction. Moreover, this discussion does not deal with non-U.S. holders that may be subject to special treatment under U.S. federal income tax laws, including, without limitation: U.S. expatriates, insurance companies, tax-exempt or governmental organizations, mutual funds, dealers or traders in securities or currency, banks or other financial institutions, "controlled foreign corporations," "passive foreign investment companies," companies that accumulate earnings to avoid U.S. federal income tax, common trust funds, certain trusts, and hybrid entities; traders in securities that use the mark-to-market method of accounting for U.S. federal income tax purposes; persons who hold our common stock in connection with a constructive sale or who acquired our common stock through the exercise of employee stock options or otherwise as compensation or through a tax-qualified investment plan; investors that hold our common stock as part of a hedge, straddle, synthetic security, conversion transaction or other integrated investment or risk reduction transaction; and individuals who are present in the United States for a period or periods aggregating 183 days or more during the calendar year in which a sale or disposition of our common stock occurs. Prospective purchasers should consult their tax advisors with respect to the particular tax consequences to them of owning and disposing of our common stock, including the consequences under the laws of any state, local or foreign jurisdiction, the effect of any changes in applicable tax law and their entitlement to benefits under any applicable tax treaty.

Distributions on Common Stock

We do not expect to pay any dividends on our common stock in the foreseeable future. If we do pay dividends on shares of our common stock, however, such distributions will constitute dividends for U.S. federal

income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital that is applied against and reduces, but not below zero, a non-U.S. holder's adjusted tax basis in shares of our common stock. Any remaining excess will be treated as gain realized on the sale or other disposition of our common stock. See "—Dispositions of Common Stock."

Any dividend paid to a non-U.S. holder on our common stock will generally be subject to U.S. federal withholding tax at a 30% rate, or a reduced rate specified by an applicable tax treaty, on the gross amount of the dividend. In order to obtain a reduced rate of withholding, a non-U.S. holder will be required to provide an IRS Form W-8BEN or W-8BEN-E (or other applicable or successor form) certifying its entitlement to benefits under a treaty. Special certification requirements and other requirements apply to certain non-U.S. holders that are entities rather than individuals. A non-U.S. holder of our common stock that is eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty may obtain a refund from the IRS of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders should consult their own tax advisors regarding any possible qualification under an income tax treaty and the filing of a U.S. tax return to claim a refund of U.S. federal withholding tax.

The withholding tax does not apply to dividends paid to a non-U.S. holder who provides a Form W-8ECI, certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if an applicable tax treaty so provides, are attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States). Instead, the effectively connected dividends will be generally subject to regular U.S. income tax as if the non-U.S. holder were a United States person, subject to an applicable tax treaty providing otherwise. In addition, in certain circumstances, if you are a foreign corporation you may be subject to a 30% (or, if a tax treaty applies, such lower rate as provided) branch profits tax.

Dispositions of Common Stock

Subject to the discussion below on backup withholding and FATCA, gain realized by a non-U.S. holder on a sale, exchange or other disposition of our common stock generally will not be subject to U.S. federal income or withholding tax, unless:

- the gain is effectively connected with a trade or business of the non-U.S. holder in the United States, subject to an applicable treaty providing otherwise, in which case the gain will be subject to U.S. federal income tax generally in the same manner as effectively connected dividend income as described above; or
- we are or have been a U.S. real property holding corporation at any time within the five-year period preceding the disposition or the non-U.S. holder's holding period, whichever period is shorter, and either (i) our common stock has ceased to be "regularly traded" as defined by applicable Treasury regulations on an established securities market prior to the beginning of the calendar year in which the sale or disposition occurs or (ii) such non-U.S. holder owns, or has owned, at any time during the five-year period preceding the disposition or such non-U.S. holder's holding period, whichever is shorter, actually or constructively, more than 5% of our common stock.

We believe that we are not, and we do not anticipate becoming, a U.S. real property holding corporation.

Backup Withholding and Information Reporting

Any dividends that are paid to a non-U.S. holder must be reported annually to the IRS and to the non-U.S. holder. Copies of these information returns also may be made available to the tax authorities of the country in which the non-U.S. holder resides under the provisions of various treaties or agreements for the exchange of information. Unless the non-U.S. holder is an exempt recipient, dividends paid on our common stock and the gross proceeds from a taxable disposition of our common stock may be subject to additional information

reporting and may also be subject to U.S. federal backup withholding (at the applicable rate, which is currently 28%) if such non-U.S. holder fails to comply with applicable U.S. information reporting and certification requirements. Provision of any properly completed IRS Form W-8 appropriate to the non-U.S. holder's circumstances will satisfy the certification requirements necessary to avoid the backup withholding. Notwithstanding the foregoing, backup withholding (and information reporting) may apply if either we or a broker or other paying agent has actual knowledge, or reason to know, that the beneficial owner is a U.S. person.

Backup withholding is not an additional tax. Any amounts so withheld under the backup withholding rules will be refunded by the IRS or credited against the non-U.S. holder's U.S. federal income tax liability, provided that the required information is timely furnished to the IRS.

FATCA Withholding Taxes

Provisions commonly referred to as "FATCA" impose withholding of 30% on payments of U.S.-source dividends, and, beginning in 2019, sales or other disposition proceeds from our common stock to "foreign financial institutions" (which is broadly defined for this purpose and in general includes investment vehicles) and certain other non-U.S. entities unless various U.S. information reporting and due diligence requirements (generally relating to ownership by U.S. persons of interests in or accounts with those entities) have been satisfied, or an exemption applies (typically certified as to by the delivery of a properly completed IRS Form W-8BEN-E). If FATCA withholding is imposed, a beneficial owner that is not a foreign financial institution generally will be entitled to a refund of any amounts withheld by filing a U.S. federal income tax return (which may entail significant administrative burden). Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules. Prospective investors should consult their tax advisers regarding the effects of FATCA on their investment in our common shares.

U.S. Federal Estate Tax

The estates of nonresident alien individuals generally are subject to U.S. federal estate tax on property with a U.S. situs. Because we are a U.S. corporation, our common stock will be U.S. situs property and therefore will be included in the taxable estate of a nonresident alien decedent, unless an applicable estate tax treaty between the United States and the decedent's country of residence provides otherwise.

THE FOREGOING DISCUSSION IS INTENDED FOR GENERAL INFORMATION ONLY AND SHOULD NOT BE VIEWED AS TAX ADVICE. INVESTORS CONSIDERING THE PURCHASE OF OUR COMMON STOCK ARE URGED TO CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME AND ESTATE TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE APPLICABILITY AND EFFECT OF STATE, LOCAL OR FOREIGN TAX LAWS AND TREATIES.

UNDERWRITING (CONFLICTS OF INTEREST)

Under the terms and subject to the conditions contained in an underwriting agreement dated , 2017, we have agreed to sell to the underwriters named below, for whom Credit Suisse (USA) LLC, Citigroup Global Markets Inc. and Wells Fargo Securities, LLC are acting as representatives the following respective numbers of shares of common stock:

Underwriter	Number of Shares
Credit Suisse Securities (USA) LLC	
Citigroup Global Markets Inc.	
Wells Fargo Securities, LLC	
J.P. Morgan Securities LLC	
Piper Jaffray & Co.	
Raymond James & Associates, Inc.	
RBC Capital Markets, LLC	
Tudor, Pickering, Holt & Co. Securities, Inc.	
Total	9,500,000

The underwriting agreement provides that the underwriters are obligated to purchase all the shares of common stock in the offering if any are purchased, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated.

The selling stockholders have also granted to the underwriters a 30-day option to purchase 1,425,000 additional outstanding shares at the initial public offering price less the underwriting discounts and commissions. The option may be exercised only to cover any over-allotments of common stock.

The underwriters propose to offer the shares of common stock initially at the public offering price on the cover page of this prospectus and to selling group members at that price less a selling concession of $ per share. After the initial public offering the underwriters may change the public offering price and concession and discount to broker/dealers. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

The following table summarizes the compensation and estimated expenses we and the selling stockholders will pay:

	Per Share		Total	
	Without Over-allotment	With Over-allotment	Without Over-allotment	With Over-allotment
Underwriting Discounts and Commissions paid by us				
Underwriting Discounts and Commissions paid by selling stockholders				
Expenses payable by us				

The expenses of this offering that have been paid or are payable by us are estimated to be approximately $2,500,000 (excluding underwriting discounts and commissions). We have agreed to pay expenses incurred by the selling stockholders in connection with this offering, other than the underwriting discounts and commissions. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to $40,000.

The underwriters have agreed to reimburse us for certain expenses incurred in connection with this offering upon closing of this offering.

We have agreed, subject to certain exceptions, that we will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, without the prior written consent of the representatives for a period of 180 days after the date of this prospectus.

Each of our executive officers, directors, the Advent Funds and certain of our other existing stockholders have agreed that they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, enter into a transaction that would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of the representatives for a period of 180 days after the date of this prospectus. The lock-up restrictions described in the foregoing do not apply to, among others, transfers of our common stock (i) as a bona fide gift; (ii) to any trust for the benefit of the lock-up party or any family member of the lock-up party; (iii) to the Company to satisfy tax withholding obligations in connection with the exercise of stock options or the vesting of restricted stock outstanding as of the date of the lock-up agreement; and (iv) in transactions relating to shares of our common stock acquired in open market transactions after the completion of this offering; provided that, for (i) and (ii) above each donee, trustee, distributee or transferee, as the case may be, agrees to be bound in writing by the restrictions described above and that any such transfer shall not involve a disposition for value; provided further that for (i), (ii), (iii) and (iv) above, any such transactions are not required to be reported in any public report or filing with the Securities and Exchange Commission, or otherwise, and the transferring party does not otherwise voluntarily effect any public filing.

Participants in the directed share program who purchase $50,000 or more of shares of our common stock under the program will be subject to a 30-day lock-up period with respect to any shares of our common stock sold to them under the program. This lock-up will have similar restrictions to the lock-up agreements described above. Any shares of common stock sold through the directed share program to our directors will be subject to the 180-day lock-up agreements described above.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel including the validity of the shares, and subject to other conditions contained in the underwriting agreement, such as receipt by the underwriters of officer’s certificates and legal opinions.

We and the selling stockholders have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

We have applied to have our common stock listed NASDAQ under the symbol “NCSM.”

In connection with the listing of the common stock on an exchange, the underwriters will undertake to sell round lots of 100 shares or more to a minimum of 450 beneficial owners.

Prior to this offering, there has been no public market for our common stock. The initial public offering price was determined by negotiations among us, the selling stockholders and the representatives and will not necessarily reflect the market price of the common stock following this offering. The principal factors that were considered in determining the initial public offering price included:

- the information presented in this prospectus and otherwise available to the underwriters;

- the history of, and prospects for, the industry in which we compete;
- the ability of our management;
- the prospects for our future earnings;
- the present state of our development, results of operations and our current financial condition;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and the demand for, publicly traded common stock of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure you that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to this offering or that an active trading market for the common stock will develop and continue after this offering.

In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions and syndicate covering transactions in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

These stabilizing transactions and syndicate covering transactions may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on an exchange the company is listed on or otherwise and, if commenced, may be discontinued at any time.

A prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters, or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations.

Conflicts of Interest

The underwriters and their respective affiliates are full-service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. These investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Affiliates of each of Citigroup Global Markets Inc., Wells Fargo Securities LLC and J.P. Morgan Securities LLC, underwriters in this offering, are lenders under our Senior Secured Credit Facilities that will be repaid with net proceeds of this offering. See “Use of Proceeds.” As a result of the repayment of our Senior Secured Credit Facilities, affiliates of Citigroup Global Markets Inc., Wells Fargo Securities LLC and J.P. Morgan Securities LLC could receive 5% or more of the net proceeds of this offering. As a result of this repayment, we expect a “conflict of interest” may be deemed to exist under FINRA Rule 5121(f)(5)(C)(i), and this offering will be made in compliance with the applicable provisions of FINRA Rule 5121, which requires a “qualified independent underwriter,” as defined by the FINRA rules, to participate in the preparation of the registration statement and the prospectus and exercise the usual standards of due diligence in respect thereto, and Credit Suisse Securities (USA) LLC has served in that capacity and will not receive any additional fees for serving as qualified independent underwriter in connection with this offering. We have agreed to indemnify Credit Suisse Securities (USA) LLC against liabilities incurred in connection with acting as a qualified independent underwriter, including liabilities under the Securities Act. To comply with FINRA Rule 5121, Citigroup Global Markets Inc., Wells Fargo Securities, LLC and J.P. Morgan Securities LLC will not confirm sales to any account over which they exercise discretionary authority without the specific written approval of the transaction of the account holder.

Directed Share Program

At our request, the underwriters have reserved for sale, at the initial public offering price, up to 475,000 shares, or approximately 5% of the common stock to be issued by us and offered by this prospectus for sale to our directors and directors of our joint venture with one of our suppliers. The sales will be made by Wells Fargo Securities, LLC through a directed share program. The number of shares of common stock available for sale to the general public in the offering will be reduced to the extent these persons purchase the directed shares in the program. Any reserved shares of common stock that are not so purchased will be offered by the underwriters to the public on the same terms as the other shares of common stock offered by this prospectus. We have agreed to indemnify the underwriters against certain liabilities and expenses, including liabilities under the Securities Act, in connection with sales of the directed shares.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a “Relevant Member State”), an offer of shares to the public may not be made in that Relevant

Member State, except that an offer of shares to the public may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provisions of the 2010 Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares shall result in a requirement for the publication of a prospectus pursuant to Article 3 of the Prospectus Directive or any measure implementing the Prospectus Directive in a Relevant Member State and each person who initially acquires any shares or to whom an offer is made will be deemed to have represented, warranted and agreed to and with the underwriters that it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of shares to the public" in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State.

In the case of any shares being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, such financial intermediary will also be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of shares to the public other than their offer or resale in a Relevant Member State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters has been obtained to each such proposed offer or resale.

Notice to Prospective Investors in the United Kingdom

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (ii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (each such person being referred to as a "relevant person"). This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

Canada

Resale Restrictions

The distribution of the shares in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we and the selling stockholders prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of the shares in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

Representations of Canadian Purchasers

By purchasing the shares in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us, the selling stockholders and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the shares without the benefit of a prospectus qualified under those securities laws as it is an "accredited investor" as defined under National Instrument 45-106—Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario),
- the purchaser is a "permitted client" as defined in National Instrument 31-103—Registration Requirements, Exemptions and Ongoing Registrant Obligations,
- where required by law, the purchaser is purchasing as principal and not as agent, and
- the purchaser has reviewed the text above under Resale Restrictions.

Conflicts of Interest

Canadian purchasers are hereby notified that each of the underwriters is relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105 – Underwriting Conflicts from having to provide certain conflict of interest disclosure in this document.

Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the offering memorandum (including any amendment thereto) such as this document contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein and the selling stockholders may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

Taxation and Eligibility for Investment

Canadian purchasers of the shares should consult their own legal and tax advisors with respect to the tax consequences of an investment in the shares in their particular circumstances and about the eligibility of the shares for investment by the purchaser under relevant Canadian legislation.

Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) ("Companies (Winding Up and Miscellaneous Provisions) Ordinance") or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) ("Securities and Futures

Ordinance"), or (ii) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA")) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for 6 months after that corporation has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation's securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore ("Regulation 32").

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S$200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended), or the FIEA. The securities may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any

corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any resident of Japan, except pursuant to an exemption from the registration requirements of the FIEA and otherwise in compliance with any relevant laws and regulations of Japan.

Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 (Cth) of Australia ("Corporations Act")) in relation to the common stock has been or will be lodged with the Australian Securities & Investments Commission ("ASIC"). This document has not been lodged with ASIC and is only directed to certain categories of exempt persons. Accordingly, if you receive this document in Australia:

(a) you confirm and warrant that you are either:

(i) a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;

(ii) a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to us which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;

(iii) a person associated with the company under section 708(12) of the Corporations Act; or

(iv) a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act, and to the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this document is void and incapable of acceptance; and

(b) you warrant and agree that you will not offer any of the common stock for resale in Australia within 12 months of that common stock being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

France

Neither this prospectus nor any other offering material relating to the shares described in this prospectus has been submitted to the clearance procedures of the *Autorité des Marchés Financiers* or of the competent authority of another member state of the European Economic Area and notified to the *Autorité des Marchés Financiers.* The shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France. Neither this prospectus nor any other offering material relating to the shares has been or will be:

- released, issued, distributed or caused to be released, issued or distributed to the public in France; or
- used in connection with any offer for subscription or sale of the shares to the public in France.

Such offers, sales and distributions will be made in France only:

- to qualified investors (*investisseurs qualifiés*) and/or to a restricted circle of investors (*cercle restreint d'investisseurs*), in each case investing for their own account, all as defined in, and in accordance with articles L.411-2, D.411-1, D.411-2, D.734-1, D.744-1, D.754-1 and D.764-1 of the French *Code monétaire et financier*;
- to investment services providers authorized to engage in portfolio management on behalf of third parties; or
- in a transaction that, in accordance with article L.411-2-II-1°-or-2°-or 3° of the French *Code monétaire et financier* and article 211-2 of the General Regulations (*Règlement Général*) of the *Autorité des Marchés Financiers*, does not constitute a public offer (*appel public à l'épargne*).

The shares may be resold directly or indirectly, only in compliance with articles L.411-1, L.411-2, L.412-1 and L.621-8 through L.621-8-3 of the French *Code monétaire et financier*.

LEGAL MATTERS

Weil, Gotshal & Manges LLP, New York, New York, has passed upon the validity of the common stock offered by this prospectus. Certain legal matters will be passed upon on behalf of the underwriters by Baker Botts L.L.P., Houston, Texas.

EXPERTS

The consolidated financial statements of NCS Multistage Holdings, Inc. as of December 31, 2016 and 2015 and for the years then ended have been included in this prospectus have been so included in reliance upon the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our common stock offered by this prospectus. For purposes of this section, the term registration statement means the original registration statement and any and all amendments including the schedules and exhibits to the original registration statement or any amendment. This prospectus, filed as part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules thereto as permitted by the rules and regulations of the SEC. For further information about us and our common stock, you should refer to the registration statement, including the exhibits. This prospectus summarizes provisions that we consider material of certain contracts and other documents to which we refer you. Because the summaries may not contain all of the information that you may find important, you should review the full text of those documents.

The registration statement, including its exhibits and schedules, may be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference room by calling 1-800-SEC-0330. Copies of such materials are also available by mail from the Public Reference Branch of the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549 at prescribed rates. In addition, the SEC maintains a website at (*http://www.sec.gov*) from which interested persons can electronically access the registration statement, including the exhibits and schedules to the registration statement.

We have not authorized anyone to give you any information or to make any representations about us or the transactions we discuss in this prospectus other than those contained in this prospectus. If you are given any information or representations about these matters that is not discussed in this prospectus, you must not rely on that information. This prospectus is not an offer to sell or a solicitation of an offer to buy securities anywhere or to anyone where or to whom we are not permitted to offer or sell securities under applicable law.

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of NCS Multistage Holdings, Inc:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations and comprehensive (loss) income, changes in stockholders' equity and cash flows present fairly, in all material respects, the financial position of NCS Multistage Holdings, Inc. as of December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule included in Schedule I presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits. We conducted our audits of these statements and financial statement schedule 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Houston, Texas
March 9, 2017, except for the effect of the stock split described in Note 17,
as to which the date is April 17, 2017

NCS Multistage Holdings, Inc.
Consolidated Balance Sheets

(in thousands except share data)	December 31, 2016	December 31, 2015
Assets		
Current assets		
Cash and cash equivalents	$ 18,275	$ 9,545
Accounts receivable—trade, net	32,116	25,225
Inventories	17,017	22,424
Prepaid expenses and other current assets	2,445	603
Other current receivables	3,053	3,354
Deferred income taxes, net	2,116	1,594
Total current assets	75,022	62,745
Noncurrent assets		
Property and equipment, net	9,759	10,584
Goodwill	122,077	119,283
Identifiable intangibles, net	118,697	138,888
Deposits and other assets	1,272	1,037
Total noncurrent assets	251,805	269,792
Total assets	$ 326,827	$ 332,537
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable—trade	$ 10,258	$ 5,077
Accrued expenses	3,290	714
Income taxes payable	—	122
Other current liabilities	3,223	2,174
Current maturities of long-term debt	772	—
Total current liabilities	17,543	8,087
Noncurrent liabilities		
Long-term debt, less current maturities	88,394	85,856
Other long-term liabilities	717	693
Deferred income taxes, net	42,695	50,432
Total noncurrent liabilities	131,806	136,981
Total liabilities	149,349	145,068
Commitments and contingencies (Note 9)		
Stockholders' equity		
Preferred stock, $.01 par value, 1 share authorized, issued, and outstanding at December 31, 2016 and December 31, 2015, respectively.	—	—
Common stock, $.01 par value, 54,000,000 shares authorized, 34,024,326 shares issued and 34,005,978 shares outstanding at December 31, 2016 and 45,000,000 shares authorized and 34,013,691 shares issued and outstanding at December 31, 2015.	340	340
Additional paid-in capital	237,566	236,110
Accumulated other comprehensive loss	(82,015)	(88,670)
Retained earnings	21,762	39,689
Treasury stock, at cost; 18,348 shares at December 31, 2016	(175)	—
Total stockholders' equity	177,478	187,469
Total liabilities and stockholders' equity	$ 326,827	$ 332,537

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

NCS Multistage Holdings, Inc.
Consolidated Statements of Operations

(in thousands except share and per share data)	December 31, 2016	December 31, 2015
Revenues		
Product sales	$ 73,220	$ 80,079
Services	25,259	33,926
Total revenues	98,479	114,005
Cost of sales		
Cost of product sales, exclusive of depreciation and amortization expense shown below	40,511	40,160
Cost of services, exclusive of depreciation and amortization expense shown below	13,322	14,553
Total cost of sales, exclusive of depreciation and amortization expense shown below	53,833	54,713
Selling, general and administrative expenses	37,061	37,804
Depreciation	1,766	2,695
Amortization	23,801	24,576
(Loss) from operations	(17,982)	(5,783)
Other (expense) income		
Interest (expense), net	(6,286)	(8,064)
Other income (expense), net	45	(131)
Foreign currency exchange (loss) gain	(2,522)	25,779
Total other (expense) income	(8,763)	17,584
(Loss) income before income tax expense	(26,745)	11,801
Income tax (benefit)	(8,818)	(16,224)
Net (loss) income	$ (17,927)	$ 28,025
Per share information		
Net (loss) income per share:		
Basic	$ (0.53)	$ 0.88
Diluted	$ (0.53)	$ 0.86
Weighted average shares outstanding		
Basic	34,007,505	29,965,946
Diluted	34,007,505	32,432,919

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

NCS Multistage Holdings, Inc.
Consolidated Statements of Comprehensive (Loss) Income

(in thousands)	December 31, 2016	December 31, 2015
Net (loss) income	$ (17,927)	$ 28,025
Foreign currency translation adjustments, net of tax of $0	6,655	(43,280)
Comprehensive (loss) income	$ (11,272)	$ (15,255)

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

NCS Multistage Holdings, Inc.
Consolidated Statements of Changes in Stockholders' Equity

(in thousands except share data)	Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Retained Earnings	Treasury Stock		Total Stockholders' Equity
	Shares	Amount	Shares	Amount				Shares	Amount	
Balances as of January 1, 2015	1	$ —	29,826,669	$ 298	$194,840	$ (45,390)	$ 11,664	—	$ —	$ 161,412
Contributions	—	—	4,187,022	42	39,957	—	—	—	—	39,999
Share-based compensation	—	—	—	—	1,313	—	—	—	—	1,313
Treasury shares purchased at cost	—	—	—	—	—	—	—	—	—	—
Net income	—	—	—	—	—	—	28,025	—	—	28,025
Currency translation adjustment	—	—	—	—	—	(43,280)	—	—	—	(43,280)
Balances as of December 31, 2015	1	$ —	34,013,691	$ 340	$236,110	$ (88,670)	$ 39,689	—	$ —	$ 187,469
Contributions	—	—	10,635	0	102	—	—	—	—	102
Share-based compensation	—	—	—	—	1,354	—	—	—	—	1,354
Treasury shares purchased at cost	—	—	—	—	—	—	—	18,348	(175)	(175)
Net loss	—	—	—	—	—	—	(17,927)	—	—	(17,927)
Currency translation adjustment	—	—	—	—	—	6,655	—	—	—	6,655
Balances as of December 31, 2016	1	$ —	34,024,326	$ 340	$237,566	$ (82,015)	$ 21,762	18,348	$ (175)	$ 177,478

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

NCS Multistage Holdings, Inc.
Consolidated Statements of Cash Flows

(in thousands)	December 31, 2016	December 31, 2015
Cash flows from operating activities		
Net (loss) income	$ (17,927)	$ 28,025
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		
Depreciation and amortization	25,567	27,271
Amortization of deferred loan cost	740	945
Share-based compensation	1,354	1,313
Provision for doubtful accounts receivable	—	113
Provision for inventory obsolescence	2,415	1,544
Deferred income tax (benefit)	(9,266)	(11,300)
(Gain)/Loss on sale of property and equipment	(143)	744
Foreign exchange loss (gain) on financing item	2,576	(26,277)
Changes in operating assets and liabilities:		
Accounts receivable—trade	(6,482)	16,297
Inventories	3,540	4,159
Prepaid expenses and other assets	(119)	(195)
Accounts payable—trade	5,131	(3,130)
Accrued expenses	1,861	(6,672)
Other current liabilities	1,209	(2,842)
Income taxes receivable/payable	228	(25,626)
Net cash provided by operating activities	10,684	4,369
Cash flows from investing activities		
Purchases of property and equipment	(1,157)	(890)
Proceeds from sales of property and equipment	317	424
Issuance of note receivable—related party	—	(755)
Funding of short-term note receivable	(1,000)	—
Net cash used in investing activities	(1,840)	(1,221)
Cash flows from financing activities		
Debt issuance cost	—	(1,195)
Payments related to public offering	(242)	—
Purchases of treasury stock	(175)	—
Repayment of term note	—	(51,570)
Proceeds from issuance of common stock	102	39,999
Net cash used in financing activities	(315)	(12,766)
Effect of exchange rate changes on cash and cash equivalents	201	(1,008)
Net change in cash and cash equivalents	8,730	(10,626)
Cash and cash equivalents		
Beginning of year	9,545	20,171
End of year	$ 18,275	$ 9,545
Supplemental cash flow information		
Cash paid for interest	$ 5,447	$ 9,381
Cash for income taxes	130	20,476
Noncash investing and financing activities		
Unpaid costs related to public offering	708	—

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

NCS Multistage Holdings, Inc.
Notes to Consolidated Financial Statements
For the Years Ended December 31, 2016 and 2015
(in thousands, except share and per share data)

1. Organization and Nature of Business

NCS Multistage Holdings, Inc. through its wholly owned subsidiaries (collectively referred to as the "Company" or "we" or "us"), is primarily engaged in providing engineered products and support services for oil and natural gas well completions and field development strategies. We offer our products and services primarily to exploration and production companies for use in onshore wells. The company operates through six service facilities principally located in Houston and Midland, Texas; and Calgary, Red Deer, Grande Prairie and Estevan, Canada. The Company had approximately 200 employees as of December 31, 2016 and its corporate headquarters are located in Houston, Texas.

The Company is a Delaware corporation that was incorporated on December 19, 2012 as a holding company for the primary purpose, through its wholly owned subsidiaries, of acquiring all of the outstanding interests in NCS Energy Holdings, LLC as of December 20, 2012. The Company changed its name from Pioneer Super Holdings, Inc. to NCS Multistage Holdings, Inc. on December 13, 2016.

For the years ended December 31, 2016 and 2015, approximately 71% and 66%, respectively, of the Company's revenues were derived from its Canadian operations.

2. Basis of Presentation

The accompanying consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). All intercompany transactions have been eliminated in consolidation.

3. Summary of Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Such estimates include but are not limited to estimated losses on accounts receivables, estimated realizable value on excess and obsolete inventories, estimates related to fair value of reporting units for purposes of assessing possible goodwill impairment, expected future cash flows from long lived assets to support impairment tests, share based compensation, amounts of deferred taxes and income tax contingencies. Actual results could materially differ from those estimates.

Foreign Currency

The Company's functional currency is the U.S. Dollar ("USD"). The financial position and results of operations of the Company's Canadian subsidiary are measured using the local currency as the functional currency. In accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 830, *Foreign Currency Matters*, revenues and expenses of the subsidiary have been translated into U.S. dollars at average exchange rates prevailing during the period. Assets and liabilities have been translated at the rates of exchange on the consolidated balance sheet date. The resulting translation gain and loss adjustments have been recorded directly as a separate component of other comprehensive (loss) in the accompanying consolidated statements of comprehensive (loss), and changes in stockholders' equity.

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Notes to Consolidated Financial Statements
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Transaction gains and losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency are included in the consolidated statements of operations as incurred.

Revenue Recognition

The Company recognizes revenue when it is determined that the following criteria are met: (i) persuasive evidence of an arrangement exists; (ii) delivery has occurred or services have been rendered; (iii) the fee is fixed or determinable; and (iv) collectability is reasonably assured. Proceeds from customers for the cost of oilfield service equipment that is damaged or lost-in-hole are reflected as revenues.

The Company recognizes revenue based upon purchase orders, contracts or other persuasive evidence of an arrangement with the customer that include fixed or determinable prices, provided that collectability is reasonably assured, but that do not include right of return or other similar provisions or other significant postdelivery obligations. Revenue is recognized generally for products upon installation and when the customer assumes the risks and rewards of ownership. In cases where services are being performed, the Company generally does not recognize revenue until a job has been completed, which includes a customer signature or acknowledgement and that there are no additional services or future performance obligation required by the Company. Rates for services are typically priced on a per day, per man-hour or similar basis that include both the cost of utilizing our downhole frac isolation assembly and our personnel required to supervise the operation of the assembly. Proceeds from customers for the cost of oilfield equipment that is damaged or lost-in-hole are reflected as revenues.

Historically, the Company has not experienced significant customer complaints regarding our products or services and therefore the Company has elected not to implement separate warranty provisions and instead records any such instances on an actual basis as they occur.

Cash and Cash Equivalents

The Company considers all highly liquid instruments purchased with an original maturity date of three months or less to be cash equivalents. These items are carried at cost, which approximates fair value.

In accordance with ASC 230, *Statements of Cash Flow*, cash flows from the Company's Canadian subsidiary are calculated based on its functional currency. As a result, amounts related to changes in assets and liabilities reported in the consolidated statements of cash flows will not necessarily agree to changes in the corresponding balances on the consolidated balance sheets.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to credit risk are cash and cash equivalents and trade accounts receivable. Cash balances are maintained in financial institutions which, at times, exceed federally insured limits. The Company monitors the financial condition of the financial institutions in which the accounts are maintained and has not experienced any losses in such accounts.

Substantially all of the Company's sales are to customers whose activities are directly or indirectly related to the oil and gas industry. The Company generally extends credit to these customers and, therefore, collection of receivables is affected by the oil and gas industry economy. The Company performs ongoing credit evaluations as to the financial condition of its customers with respect to trade accounts receivables. Generally, no collateral is required as a condition of sale.

NCS Multistage Holdings, Inc.
Notes to Consolidated Financial Statements
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(in thousands, except share and per share data)

For the years ended December 31, 2016 and 2015, there was one customer that accounted for 10% or more of the total revenue or 10% or more of the total accounts receivable balance at the end of the respective periods. The Company recognized revenue from this one customer totaling approximately $25.5 million, or 26% of 2016 total revenue for the year ended December 31, 2016 and approximately $35.1 million or 31% of 2015 total revenue for the year ended December 31, 2015. Amounts due from this customer included in trade accounts receivable in the accompanying consolidated balance sheets was approximately $7.8 million as of December 31, 2016 and $4.4 million as of December 31, 2015. No other customer individually accounted for 10% or more of the Company's consolidated revenue during 2016 and 2015 or trade receivable balance as of December 31, 2016 and 2015.

Accounts Receivable, Trade and Allowance for Doubtful Accounts

Trade accounts receivables are carried at their estimated collectible amounts. Trade credit is generally extended on a short-term basis; thus receivables do not bear interest, although a finance charge may be applied to amounts past due.

The Company maintains an allowance for doubtful accounts for estimated losses that may result from the inability of its customers to make required payments. Earnings are charged with a provision for doubtful accounts based on a current review of the collectability of customer accounts by management. Such allowances are based upon several factors including, but not limited to credit approval practices, industry and customer historical experience as well as the current and projected financial condition of the specific customer. Accounts deemed uncollectible are applied against the allowance for doubtful accounts. As of December 31, 2016 and 2015, the Company has recorded approximately $70 and $445, respectively, in provisions for doubtful accounts.

Inventories

Inventories consist primarily of raw material, sliding sleeves components, assembled sliding sleeves and certain components used to internally construct our frac isolation assemblies. Inventories are stated at the lower of cost or estimated net realizable value. Cost is determined at standard costs approximating the first-in first-out basis. The Company continuously evaluates inventories, based on an analysis of inventory levels, historical sales experience and future sales forecasts, to determine obsolete, slow-moving and excess inventory. Adjustments to reduce such inventory to its estimated recoverable value have been recorded as an adjustment to cost of sales.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Equipment held under capital leases are stated at the present value of minimum lease payments. Expenditures for property and equipment and for items which substantially increase the useful lives of existing assets are capitalized at cost and depreciated over their estimated useful life utilizing the straight-line method. Routine expenditures for repairs and maintenance are expensed as incurred. Depreciation is calculated over the estimated useful lives of the related assets using the straight-line method. Leasehold improvements and property under capital leases are amortized over the shorter of the remaining lease term or useful life of the related asset. Depreciation expense includes amortization of assets under capital leases. The cost and related accumulated depreciation of assets retired or otherwise disposed of are eliminated from the accounts, and any resulting gains or losses are recognized in operations in the year of disposal.

NCS Multistage Holdings, Inc.
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Depreciation on property and equipment, including assets held under capital leases, is calculated using the straight-line method over the following useful service lives or lease term (which includes reasonably assured renewal periods):

	Years
Buildings	30
Building equipment	5-15
Machinery and equipment	12
Furniture and fixtures	3-5
Computers and software	3-5
Vehicles and rental equipment	3-4
Leasehold improvements	Lease term (1-4)

The Company periodically assesses potential impairment of its property and equipment, when events or changes in circumstances occur that indicate the carrying value of the asset or asset group may not be recoverable. The assessment of possible impairment is based on the Company's overall valuation calculation using forward looking as well as historical computations to measure the value of the Company. If the overall valuation results are less than the carrying value of such assets, an impairment loss is recognized for the difference between estimated fair value and carrying value. No impairment loss has been recognized for the years ended December 31, 2016 and 2015.

Goodwill and Intangible Assets

For goodwill, an assessment for impairment is performed annually or when there is an indication an impairment may have occurred. The Company completes its annual impairment test for goodwill using an assessment date in the fourth quarter of each fiscal year. Goodwill is reviewed for impairment by comparing the carrying value of the reporting unit's net assets (including allocated goodwill) to the fair value of the reporting unit. The fair value of the reporting unit is determined using a discounted cash flow approach. Determining the fair value of a reporting unit requires the use of estimates and assumptions. Such estimates and assumptions include revenue growth rates, operating margins, weighted average costs of capital, a terminal growth rate, and future market conditions, among others. The Company believes that the estimates and assumptions used in impairment assessments are reasonable. If the reporting unit's carrying value is greater than its fair value, a second step is performed whereby the implied fair value of goodwill is estimated by allocating the fair value of the reporting unit in a hypothetical purchase price allocation analysis. The Company recognizes a goodwill impairment charge for the amount by which the carrying value of goodwill exceeds its fair value. The Company concluded that there was no impairment of goodwill or identifiable intangibles in 2016 and 2015. All identifiable intangibles are amortized on a straight-line basis over the estimated useful life or term of related agreements as indicated above. These assets are tested for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable.

Income Taxes

The Company is taxed as a corporation as defined under the Internal Revenue Code. The liability method is used in accounting for deferred income taxes. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when these differences are expected to reverse. The realizability of deferred tax assets are evaluated annually and a valuation allowance is provided if it

NCS Multistage Holdings, Inc.
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(in thousands, except share and per share data)

is more likely than not that the deferred tax assets will not give rise to future benefits. The Company follows guidance in ASC 740 “Income Taxes” for uncertainty in income taxes by prescribing the minimum recognition threshold an income tax position is required to meet before being recognized in the consolidated financial statements and applies to all income tax positions. Each income tax position is assessed using a two-step process. A determination is first made as to whether it is more likely than not that the income tax position will be sustained, based upon technical merits, upon examination by the taxing authorities. If the income tax position is expected to meet the more likely than not criteria, the benefit recorded in the consolidated financial statements equals the largest amount that is greater than 50% likely to be realized upon its ultimate settlement. A valuation allowance to reduced deferred tax assets is established when is more likely than not that some portion or all the deferred tax assets will not be realized. As of December 31, 2016 and 2015, the Company’s valuation allowance was approximately $63. The Company recognizes accrued interest and penalties related to uncertain tax positions in other income (expense) on the statement of operations. During the year ended December 31, 2016 and 2015, respectively, the Company recognized approximately $129 and $82 in interest and penalties. The Company had approximately $411 and $664 in interest and penalties accrued at December 31, 2016 and 2015, respectively.

The Company completed its analysis of its tax positions and believes there are no material uncertain tax positions that would require recognition in the consolidated financial statements as of December 31, 2016 and 2015. The Company believes that there are no tax positions taken or expected to be taken as of December 31, 2016 and 2015 that would significantly increase or decrease unrecognized tax benefits within the next twelve months following the balance sheet date. As of December 31, 2016 and 2015, there were no material amounts that had been accrued with respect to uncertain tax positions.

During 2014, our Canadian subsidiary guaranteed the credit facilities of our U.S. entities. Under U.S. federal income tax rules, this guarantee results in all of the earnings and profits of our Canadian subsidiary being subject to current U.S. tax. As a result, we have recognized a U.S. deferred tax liability of $3.9 million and $4.0 million as of December 31, 2016 and 2015, respectively, related to a portion of our outside basis differences in our Canadian subsidiary for which we are unable to assert indefinite reinvestment. No U.S. deferred taxes have been recognized on $52.1 million and $54.2 million as of December 31, 2016 and 2015, respectively, of our outside basis differences that we continue to indefinitely reinvest. Upon reversal of these outside basis differences through dividends or otherwise, we may be subject to U.S. income taxes (subject to adjustment for foreign tax credits) and foreign withholding taxes. It is not practical, however, to estimate the amount of taxes that may be payable on the eventual remittance of these temporary differences after consideration of available foreign tax credits.

The Company files income tax returns in the U.S. and in various state and foreign jurisdictions. The Company’s U.S. income tax returns for 2011 and subsequent years remain open for examination. The Internal Revenue Service (“IRS”) commenced an examination of the Company’s U.S. income tax return for 2011 through 2012 in the first quarter of 2014 which was completed in 2015. No tax adjustments were proposed. Additionally, the IRS commenced an examination of the Company’s U.S. income tax return for 2014 in the second quarter of 2016. No tax adjustments have been proposed.

Share-Based Compensation

The Company measures all share-based compensation awards at fair value on the date they are granted, and recognizes compensation cost, net of forfeitures, over the requisite service period for awards with only a service condition, and over a graded vesting period for awards with service and performance conditions.

NCS Multistage Holdings, Inc.
Notes to Consolidated Financial Statements
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The Black-Scholes option pricing model is used to measure the fair value of options. The following sections address the assumptions used related to the Black-Scholes option pricing model:

Expected volatility—The Company developed its expected volatility by using the historical volatilities of the Company's peer group of public companies for a period equal to the expected life of the option by taking the median of the annualized weekly ten year standard deviation of their stock prices.

Risk-free interest rate—The risk-free interest rates for options granted are based on the ten year constant maturity Treasury bond rates whose term is consistent with the expected life of an option from the date of grant.

Expected Term—As the Company does not have sufficient historical experience for determining the expected term of the stock option awards granted, we based our expected term for awards issued to employees on the "simplified" method under the provisions of ASC 718-10. The expected term is based on the midpoint between the vesting date and contractual term of an option. The expected term represents the period that our stock-based awards are expected to be outstanding.

Expected dividend yield—The Company does not anticipate paying cash dividends on our shares of common stock; therefore, the expected dividend yield is assumed to be zero.

Shipping and Handling Fees and Cost

Shipping and handling fees, if billed to customers, are included in revenues. Shipping and handling costs are classified as cost of revenues.

Fair Value

The carrying amounts for financial instruments classified as current assets and current liabilities approximate fair value, due to the short maturity of such instruments. The book values of other financial instruments, such as the Company's debt under its Credit Facility, approximates fair value because interest rates charged are similar to other financial instruments with similar terms and maturities and the rates vary in accordance with a market index in accordance with ASC 820—Fair Value measurement.

For the financial assets and liabilities disclosed at fair value, fair value is determined as the exit price, or the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The established fair value hierarchy divides fair value measurement into three broad levels:

- Level 1—inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date;
- Level 2—inputs other than quoted prices included within Level 1 that are observable for the assets or liability, either directly or indirectly; and
- Level 3—inputs are unobservable for the asset or liability, which reflect the best judgment of management.

The financial assets and liabilities that are disclosed at fair value for disclosure purposes are categorized in one of the above three levels based on the lowest level input that is significant to the fair value measurement in its entirety. Level 1 provides the most reliable measure of fair value, whereas Level 3 generally requires significant management judgment.

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Earnings Per Share

Basic income per share is calculated by dividing net income, reduced for the allocation of net income (loss) attributable to participating security holders of exchangeable securities held in the Company's indirect subsidiary, by the weighted-average number of common shares outstanding during the period. The participating security holders were allocated 0% and 5.72% of the net income for December 31, 2016 and 2015, respectively. The participating security holders are not contractually obligated to share in the losses of the Company, therefore, losses are not allocated to the participating security holders. The diluted income per share computation is calculated by dividing net income by the weighted-average number of common shares outstanding during the period, taking into effect, if any, of shares that would be issuable upon the exercise of outstanding stock options and conversion of the participating security holders exchangeable securities, reduced by the number of shares purchased by the Company at cost, when such amounts are dilutive to the income per share calculation. There is no dilutive effect for 2016 since the company is in a net loss position.

Research and Development

Research and development ("R&D") costs are incurred both through engaging third parties to perform development activities under coordination and management of the Company as well as through the utilization of Company employees to create and develop new ideas and product. The Company incurred approximately $3.3 million and $3.0 million in R&D costs for the years ended December 31, 2016 and 2015, respectively. These costs are recorded in selling, general and administrative expense on the statements of operation.

Recent Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases* ("ASC 842"), which replaces the existing guidance in ASC 840, *Leases*. ASC 842 requires lessees to recognize most leases on their balance sheets as lease liabilities with corresponding right-of-use assets. The new lease standard does not substantially change lessor accounting. The new standard is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted. We are currently evaluating the impact of the adoption of this guidance.

In November 2015, the FASB issued ASU No. 2015-17, *Balance Sheet Classification of Deferred Taxes*. This standard requires all deferred taxes, along with any related valuation allowance, to be presented as a noncurrent deferred asset or liability. The guidance is effective for fiscal years beginning after December 15, 2016, and includes interim periods within those fiscal years. Early adoption is permitted and the guidance may be applied either prospectively, for all deferred tax assets and liabilities, or retrospectively by reclassifying the comparative balance sheet. We do not expect this ASU to have a material impact on our financial statements.

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*, which requires companies to measure inventory at the lower of cost or net realizable value rather than at the lower of cost or market. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The new standard is effective for the Company for the fiscal year beginning after December 15, 2016 and interim periods within those fiscal years. The Company has early adopted the guidance as of January 1, 2016 and there was no material impact on our financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements—Going Concern*. The new standard requires management to evaluate whether there are conditions and events that raise

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substantial doubt about an entity's ability to continue as a going concern for both annual and interim reporting. The guidance is effective for the Company for the annual period ending after December 15, 2016 and interim periods thereafter. Management performed an evaluation of the Company's ability to fund operations and to continue as a going concern according to ASC Topic 205-40, Presentation of Financial Statements—Going Concern. The guidance did not have a material impact on our financial statements.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The new standard is effective for annual reporting periods beginning after December 15, 2017 and early adoption is permitted, however, not before fiscal years beginning after December 15, 2016. Subsequent to ASU 2014-09's issuance, Topic 606 was amended for FASB updates that changed the Effective date as well as addressing certain aspects regarding new revenue standards. The comprehensive new standard will supersede existing revenue recognition guidance and require revenue to be recognized when promised goods or services are transferred to customers in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. Adoption of the new rules could affect the timing of revenue recognition for certain transactions. The guidance permits two implementation approaches, one requiring retrospective application of the new standard with restatement of prior years and one requiring prospective application of the new standard with disclosure of results under old standards. We are currently evaluating this standard in order to select a transition method and the effective date. We have not determined the effect of this standard on our financial statements and related disclosures.

4. Inventories

Inventories consist of the following as of December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
Raw materials	$ 695	$ 2,303
Work in process	688	104
Finished goods	15,634	20,017
	$ 17,017	$ 22,424

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5. Property and Equipment

Property and equipment consist of the following as of December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
Land	$ 2,026	$ 1,966
Building and improvements	4,517	4,234
Machinery and equipment	1,983	1,796
Computers and software	1,345	1,102
Furniture and fixtures	916	894
Vehicles	2,475	2,730
Service equipment	1,964	2,297
	15,226	15,019
Less: Accumulated depreciation and amortization	5,763	4,794
	9,463	10,225
Construction in progress	296	359
Property and equipment, net	$ 9,759	$ 10,584

Depreciation expense and amortization for property and equipment totaled approximately $1.8 million and $2.7 million for the years ended December 31, 2016 and 2015, respectively.

The Company leases vehicles for its transportation fleet, which are included in the table above. See Note 9—Commitments and Contingencies for the related amortization expense.

6. Goodwill and Identifiable Intangibles

Changes in the carrying amount of goodwill is as follows:

At December 31, 2014	$137,709
Currency translation adjustment	(18,426)
At December 31, 2015	119,283
Currency translation adjustment	2,794
At December 31, 2016	$122,077

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Identifiable intangibles consist of the following:

	Estimated Useful Lives (Years)	December 31, 2016 Gross Carrying Amount	Accumulated Amortization	Net Balance
Technology	14	$138,026	$ (39,956)	$ 98,070
Trademark	5	936	(759)	177
In-process research and development	5	35,306	(28,621)	6,685
Customer relationships	15	11,577	(3,128)	8,449
Noncompete agreements	5	28,065	(22,749)	5,316
Total identifiable intangibles		$213,910	$ (95,213)	$118,697

	Estimated Useful Lives (Years)	December 31, 2015 Gross Carrying Amount	Accumulated Amortization	Net Balance
Technology	14	$134,919	$ (29,421)	$105,498
Trademark	5	916	(559)	357
In-process research and development	5	34,305	(20,948)	13,357
Customer relationships	15	11,307	(2,301)	9,006
Noncompete agreements	5	27,400	(16,730)	10,670
Total identifiable intangibles		$208,847	$ (69,959)	$138,888

Total amortization expense for the years ended December 31, 2016 and 2015 was $23.8 million and $24.0 million, respectively.

The total weighted average amortization period is 9 years and estimated future amortization expense is as follows:

2017	$22,810
2018	10,631
2019	10,631
2020	10,631
2021	10,631
Thereafter	53,363

7. Accrued Expenses

Accrued expenses consist of the following as of December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
Accrued payroll	$ 850	$ 334
Property and franchise taxes accrual	322	337
Accrual related to public offering	1,153	—
Accrued acquisition related costs	618	—
Accrued other miscellaneous liabilities	347	43
	$ 3,290	$ 714

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8. Revolving Line of Credit and Long-term Debt

The Company's long-term debt, net is as follows:

	December 31, 2016	December 31, 2015
Term	$ 90,836	$ 88,260
Revolving line of credit	—	—
Total	90,836	88,260
Less debt issuance costs	1,670	2,404
Total debt, net	89,166	85,856
Less: current portion	(772)	—
Long-term debt	$ 88,394	$ 85,856

Effective August 7, 2014, the Company entered into a new credit agreement with a group of financial institutions which was denominated in Canadian dollars ("CAD") and allows for a term loan of up to approximately $197.6 million CAD ($180.0 million USD), and a $38.4 million CAD ($35.0 million USD) revolving line of credit of which $5.0 million CAD ($3.8 million USD) may be made available for letters of credit and $5.0 million CAD ($3.8 million USD) may be made available for swingline loans.

The term loan bears interest at the adjusted base rate or Canadian base rate plus an applicable margin, as defined in the credit agreement governing the Credit Facility, with quarterly interest payments. The applicable interest rate at December 31, 2016 and 2015 was 5.769% and 5.512%, respectively. The term loan is collateralized by certain assets of the Company and guaranteed by certain wholly owned subsidiaries of the Company. The interest on the term loan is payable in quarterly installments. Beginning in November 2017, quarterly principal payments will resume with all unpaid principal and interest due at maturity on August 7, 2019. The term loan had an outstanding balance of $90.8 million and $88.3 million as of December 31, 2016 and 2015, respectively. We incurred interest expense of $5.5 million and $7.3 million for the years ended December 31, 2016 and 2015, respectively.

The revolving line of credit is collateralized by certain assets of the Company and guaranteed by certain wholly owned subsidiaries of the Company. Interest on the revolving line of credit is payable monthly at the adjusted base rate or Canadian base rate plus an applicable margin, as defined in the agreement governing the Credit Facility. All unpaid principal and interest on the revolving line of credit is due at maturity on August 7, 2019. As of December 31, 2016 and 2015, the outstanding balance under the revolving line of credit was zero.

The agreement governing the Credit Facility contains financial covenants that requires (i) commencing with the fiscal quarter ended March 31, 2019, compliance with a leverage ratio test set at 3.00 to 1.00 as of the last day of each fiscal quarter, (ii) commencing with the fiscal quarter ended March 31, 2019, compliance with a fixed charge coverage ratio test set at 1.25 to 1.00 as of the last day of each fiscal quarter and (iii) commencing with the fiscal quarter ended December 31, 2015, compliance with an interest coverage ratio set at (x) 1.50 to 1.00 as of the last day of each fiscal quarter through and including the fiscal quarter ended December 31, 2017 and (y) 1.75 to 1.00 as of the last day of the fiscal quarter ended March 31, 2018 through and including the fiscal quarter ending December 31, 2018. As of December 31, 2016, the Company was in compliance with these covenants. Our ability to meet these financial ratios can be affected by events beyond our control and we cannot assure you that we will be able to meet these ratios. A breach of any covenant or restriction contained in the agreement governing our Credit Facility could result in a default under this agreement. If any such default

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occurs, the lenders under the Credit Facility, may elect (after the expiration of any applicable notice or grace periods) to declare all outstanding borrowings, together with accrued and unpaid interest and other amounts payable thereunder, to be immediately due and payable. The lenders under the Credit Facility also have the right upon an event of default thereunder to terminate any commitments they have to provide further borrowings. Further, following an event of default under the agreement governing our Credit Facility, the lenders under the Credit Facility will have the right to proceed against the collateral granted to them to secure that debt. If the debt under the Credit Facility was to be accelerated, our assets may not be sufficient to repay in full that debt or any other debt that may become due as a result of that acceleration.

The Company entered into Amendment No. 1, effective April 15, 2015, which modified the original agreement governing the Credit Facility. The modifications change various defined terms as well as the covenants. On December 22, 2015, the Company prepaid a portion of the principal balance outstanding on the term loan with proceeds from the sale of common stock as described in Note 10 below when it Amendment No. 2 to the original agreement governing the Credit Facility. This amendment also revised the revolving credit commitment to $27.8 million CAD ($20.0 million USD).

Future principal payments on long-term debt for each of the years ending December 31, are as follows:

2017	$ 772
2018	23,894
2019	66,170
2020	—
Thereafter	—
	$90,836

Deferred loan costs are also included as part of debt and are amortized to interest expense using the effective interest method in accordance with ASC 470 *Debt*. Direct costs incurred in connection with the term loan have been capitalized and are amortized over the term of the debt using the effective interest method. Net fees attributable to the lender of approximately $1.7 million and $2.4 million are presented as a discount to the carrying value of the debt as of December 31, 2016 and 2015, respectively. Amortization expense of the deferred financing charges of approximately $740 and $945 are included in interest expense for the years ended December 31, 2016 and 2015, respectively.

The estimated fair value of total debt was approximately $92.8 million and $87.7 million as December 31, 2016 and 2015, respectively. The fair value was estimated using Level 2 inputs by calculating the sum of the discounted future interest and principal payments through the date of maturity.

9. Commitments and Contingencies

Litigation

In the ordinary course of business, the Company is involved in various pending or threatened legal actions, some of which may or may not be covered by insurance. Management has reviewed such pending judicial and legal proceedings, the reasonably anticipated costs and expenses in connection with such proceedings, and the availability and limits of insurance coverage, and has established reserves that are believed to be appropriate in light of those outcomes that are believed to be probable and can be estimated. The reserves accrued as of

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December 31, 2016 and 2015 are immaterial. In the opinion of management, the Company's ultimate liability, if any, with respect to these actions is not expected to have a material adverse effect on the Company's financial position, results of operations or cash flows.

Operating Leases

The Company has entered into certain operating lease commitments for buildings and office equipment, which expire at various dates through April 2022. Total rental expense charged to consolidated statement of operations was approximately $2.1 million for each of the years ended December 31, 2016 and 2015.

Minimum rental payments under non-cancelable operating leases which have terms in excess of one year as of December 31, 2016, are as follows:

2017	$1,499
2018	1,320
2019	848
2020	210
2021	182
Thereafter	31
Total payments	$4,090

Capital Leases

The Company has entered into various capital lease agreements which expire at various dates through 2019. Total capital lease amortization expense was $201 for each of the years ended December 31, 2016 and 2015. Future minimum lease payments under capital leases at December 31, 2016, together with the present value of the minimum lease payments, are as follows:

2017	$ 246
2018	181
2019	14
2020	13
2021	—
Less: amount representing interest	(53)
Present value of payments	401
Less: current portion	(246)
Long-term payment obligations	$ 155

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Property under capital leases included within property and equipment consisted of the following at December 31, 2016 and 2015:

	As of	
	December 31, 2016	December 31, 2015
Vehicles	$ 1,025	$ 1,016
Gross assets under capital leases	1,025	1,016
Less: Accumulated Depreciation	439	253
Net assets under capital leases	$ 586	$ 763

10. Stockholders' Equity

The Company currently has common stock and preferred stock outstanding. In September 2016, the Company was authorized to increase the available shares of common stock for issuance from 45.0 million to 54.0 million shares with $.01 par value.

On December 22, 2015, the Company received approximately $40.0 million in aggregate proceeds in connection with the sale of 4,187,022 shares of common stock. As of December 31, 2016 and 2015, 34,005,978 and 34,013,691 shares of common stock were outstanding, respectively.

As of December 31, 2016, the Company was also authorized to issue 1 share of preferred stock with $0.01 par value, defined as the "Special Voting Share" in the amended and restated certificate of incorporation. As of December 31, 2016 and 2015, 1 share of preferred stock was issued and outstanding.

The holders of common stock are entitled to one vote for each share of common stock held. The holder of the Special Voting Share shall be entitled to vote on all matters that a holder of common stock is entitled to vote on and shall be entitled to cast a number of votes equal to the number of exchangeable shares of NCS Multistage, Inc. (NCS Canada), a subsidiary of the Company, then outstanding that are not owned by the Company, multiplied by the exchange ratio (as defined in the Company's articles of incorporation). As of December 31, 2016 and 2015, exchangeable shares for common stock totaled 1,819,247 and are held by the preferred stockholder. The holders of common stock are entitled to receive dividends as declared from time-to-time by the Company's Board of Directors and Dividend Committee. The holder of the Special Voting Share is not entitled to receive dividends. During the years ended December 31, 2016 and 2015, no dividends were declared.

Upon acquiring all of the outstanding interests in NCS Energy Holdings, LLC as of December 20, 2012, the remaining options outstanding, approximating 649,000, under the predecessor company immediately vested and remain exercisable as of December 31, 2016 and 2015.

11. Share-Based Compensation

2012 NCS Incentive Stock Plan

The Board of Directors of the Company adopted and approved the NCS 2012 Equity Incentive plan on December 20, 2012 as amended on February 6, 2015 and July 1, 2016 (the "NCS Plan"). The NCS Plan permits the grant of incentive stock options, stock appreciation rights, restricted stock, dividend equivalent or other stock based awards (referred to as "Options" or "Awards") related to the Company's common stock to officers,

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directors, employees and consultants of the Company through December 31, 2016. The original aggregate number of shares of 2,426,121 that may be issued pursuant to awards made under the 2012 Plan was increased to 2,550,000 shares on July 1, 2016 by way of an amendment approved by the Board of Directors. As of December 31, 2016 and 2015, there were 86,499 and 16,875 shares available for future grants under the NCS Plan, respectively.

In conjunction with the stock options issued above to key employees, the Company also issued "Liquidity Awards" with weighted average grant date fair value of $6.89 and weighted average remaining contractual life of 6 years. These Liquidity Awards will become 100% vested on the effective date of a Company Sale (as defined below), subject to the grantee's continued service through the consummation of the Company Sale. Company Sale is defined as (a) any transaction or series of related transactions in which any person or group of persons other than the Advent International Corporation or its affiliates shall (i) directly or indirectly, acquire, whether by purchase, exchange, tender offer, merger, consolidation, recapitalization or otherwise, or (ii) otherwise be the owner of (as a result of a redemption of shares or otherwise), shares or other equity in a successor entity (by merger, consolidation or otherwise) such that following such transaction or transactions, such person or group of persons and their respective affiliates beneficially own fifty percent (50%) or more of the voting power at elections for the board of directors of the Company or any successor entity, or (b) the sale, transfer or other disposition of all or substantially all of the Company's assets, in one or a series of related transactions; provided, however, that in no event shall a Company Sale be deemed to include (x) any transaction effected for the purpose of (i) changing, directly or indirectly, the domicile or form of organization or the organizational structure of the Company or any of its subsidiaries or (ii) contributing assets or equity to entities controlled by the Company (or owned by the stockholders of the Company in substantially the same proportions as the stockholders own of the Company immediately prior to such contribution), or (y) an initial public offering or other primary issuance of shares. The grantee may exercise Liquidity Awards at any time after a Company Sale and prior to the earliest to occur of (i) the tenth anniversary of the grant date, (ii) the date that is 90 days following the grantee's termination for any reason other than death, permanent disability or cause, (iii) the date that is twelve months following termination of grantee's service due to death or permanent disability and (iv) the date of the grantee's termination for cause. Accordingly, no value has been reflected in the consolidated financial statements for the Liquidity Awards as they will not vest until the occurrence of a change in control event. Total unamortized expense related to the Liquidity Awards at December 31, 2016 and 2015 amounted to approximately $10.1 million and $9.9 million, respectively.

Determining fair market value

Determining the appropriate fair value model and calculating the fair value of options requires the input of highly subjective assumptions, including the expected volatility of the price of our stock, the risk-free rate, the expected term of the options and the expected dividend yield of our common stock. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, our share-based compensation expense could be materially different in the future. The Company estimates the fair value of each option grant using the Black-Scholes option-pricing model. The Black-Scholes option pricing model requires estimates of key assumptions based on both historical information and management judgment regarding market factors and trends.

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The weighted average assumptions used to estimate the fair value of stock options granted in 2016 and 2015 are as follows:

	2016	2015
Volatility	42% - 45%	43%
Risk free interest rate	1.69%	2.29%
Expected term (in years)	6.5	6.5
Dividend yield	0%	0%

The follow table summarizes transactions involving outstanding Awards under the NCS Plan:

2012 NCS Plan	Time Based Shares	Liquidity Shares	Total Shares	Time Based Weighted Average Exercise Price	Liquid Based Weighted Average Exercise Price	Time Based Weighted Average Remaining Contractual Life (Years)	Liquidity Weighted Average Remaining Contractual Life (Years)
Outstanding at December 31, 2014	959,259	1,427,637	2,386,896	$ 6.18	$ 6.27	8.05	9.00
Granted during the year	21,894	20,406	42,300	7.35	11.82		
Exercised during the year	—	—	—	—	—		
Forfeited during the year	(7,980)	(11,970)	(19,950)	5.88	5.88		
Outstanding at December 31, 2015	973,173	1,436,073	2,409,246	$ 6.13	$ 6.35	7.05	7.03
Granted during the year	24,348	46,533	70,881	9.55	9.58		
Exercised during the year	—	—	—	—			
Forfeited during the year	(6,651)	(9,975)	(16,626)	5.88	5.88		
Outstanding at December 31, 2016	990,870	1,472,631	2,463,501	$ 6.01	$ 6.19	6.19	6.19
Unvested as of December 31, 2016	251,610	1,472,631	1,724,241	$ 6.57	$ 6.19		
Exercisable as at December 31, 2016	739,260	—	739,260	$ 5.82	N/A	6.19	N/A

As of December 31, 2016 and 2015, there was approximately $1.6 million and $2.8 million in unrecognized compensation expense related to the non-vested portion of the time vested options granted, respectively. The cost of those options is expected to be recognized over a period of five years from the date of grant.

Share based compensation expense of approximately $1.4 million and $1.3 million was recognized in selling, general and administrative expense in the Company's consolidated statements of operations for the years ended December 31, 2016 and 2015, respectively.

12. Employee Benefit Plan

The employees of the Company are eligible to participate in a 401(k) plan sponsored by the Company. All eligible employees may contribute a percent of their compensation subject to a maximum imposed by the Internal Revenue Code. All Company contributions are discretionary. During the period January 1, 2015 through April 30, 2015, the Company matched 6% of gross pay contributed by each employee until the program was suspended on April 30, 2015. The matching program was reinitiated on January 1, 2016 by the Company and matched approximately 4% of gross pay for the remainder of 2016. The Company's contribution was approximately $563 and $575 for the years ended December 31, 2016 and 2015, respectively.

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13. Income Taxes

The provision (benefit) from income taxes consists of the following for the years ended December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
Current tax expense (benefit)		
U.S. Federal	$ (505)	$ (9,047)
State	(145)	189
Foreign	1,098	3,934
Total current	448	(4,924)
Deferred tax expense (benefit)		
U.S. Federal	(4,190)	(7,608)
State	(133)	253
Foreign	(4,943)	(3,945)
Total deferred	(9,266)	(11,300)
Total income taxes	$ (8,818)	$ (16,224)

The following is the domestic and foreign components of the Company's (loss) income before income taxes for the years ended December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
U.S. Federal	$ (15,221)	$ 18,047
Foreign	(11,524)	(6,246)
(Loss) Income before income taxes	$ (26,745)	$ 11,801

The following is a summary of the items that caused recorded income taxes to differ from income taxes computed using the statutory federal income tax rate for the years ended December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
Income tax expense at federal statutory rate	35.0%	35.0%
Increase (Decrease) in income taxes resulting from		
Effect of foreign deemed and unremitted earnings	(3.6)%	20.2%
Change in tax year for subsidiary	0.0%	(105.9)%
Outside basis adjustment on foreign subsidiary	1.8%	(99.6)%
Effect of rate change on deferred tax	0.0%	16.2%
Different rate on earnings of foreign operations	(3.6)%	4.3%
Research credits	3.0%	(6.3)%
Manufacturing deduction	0.3%	(7.6)%
Non deductible expenses	(1.2)%	3.1%
State taxes	0.8%	3.1%
Other	0.5%	0.0%
Income tax	33.0%	(137.5)%

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The Company recorded a tax (benefit) of $(8.8) million and $(16.2) million for the years ended December 31, 2016 and 2015, respectively. For the years ended December 31, 2016 and 2015, the company's effective tax rate was approximately 33.0% and (137.5%). The negative effective tax rate in 2015 was primarily due to a tax planning strategy and the effect of our outside basis book value and tax differences in our Canadian subsidiary. The tax planning strategy resulted in the company receiving permission from a foreign tax authority to change the year end to conform to U.S. income tax reporting.

The tax effects of temporary differences that give rise to significant portions of deferred tax assets and deferred tax liabilities as of December 31, 2016 and 2015 are as follows:

	For the years ended	
	December 31, 2016	December 31, 2015
Deferred tax assets		
Accruals not currently deductible	$ 2,829	$ 1,531
Tax credit carryforwards	872	356
Other	1,221	1,896
	4,922	3,783
Valuation allowance for deferred tax assets	(63)	(63)
Total deferred tax assets	4,859	3,720
Deferred tax liabilities		
Depreciation and amortization	(33,913)	(39,889)
Foreign currency translation	(6,843)	(7,802)
Foreign unremitted earnings	(3,869)	(4,356)
Other	(813)	(511)
Total deferred tax liabilities	(45,438)	(52,558)
Net deferred tax liabilities	$ (40,579)	$ (48,838)

The above are included in the accompanying consolidated balance sheet as follows:

	December 31, 2016	December 31, 2015
Deferred income tax assets—current	$ 2,116	$ 1,594
Deferred income tax liabilities—noncurrent	(42,695)	(50,432)
	$ (40,579)	$ (48,838)

NCS Multistage Holdings, Inc.
Notes to Consolidated Financial Statements
For the Years Ended December 31, 2016 and 2015
(in thousands, except share and per share data)

14. Earnings Per Share

The following table presents the reconciliation of the numerator and denominator for calculating earnings per share from net (loss) income:

	For the years ended	
	December 31, 2016	December 31, 2015
Basic EPS:		
Net (loss) income	$ (17,927)	$ 28,025
Less income attributable to participating shares	—	1,604
Net income attributable to participating shares	$ (17,927)	$ 26,421
Basic weighted average number of shares*	34,007,505	29,965,946
Basic net (loss) income per common share	$ (0.53)	$ 0.88
Diluted EPS:		
Net (loss) income	$ (17,927)	$ 28,025
Less income attributable to participating shares	—	—
Net income attributable to participating shares	$ (17,927)	$ 28,025
Diluted weighted average number of shares*	34,007,505	32,432,919
Diluted net (loss) income per common share	$ (0.53)	$ 0.86

* Previously reported shares have been adjusted to correct immaterial amounts.

15. Related Party Transactions

As of December 31, 2016 and December 31, 2015, the Company held a long-term note receivable in the amount of approximately $750 due from a related party. The terms of the agreement call for a maturity date of December 31, 2020 with interest due at a rate of 1.67% compounded semi-annually beginning on January 1, 2016. We purchased services and grease in the amount of approximately $49 and $59 from a related party in the years ended December 31, 2016 and 2015.

16. Segment and Geographic Information

The Company has determined that it operates in one reportable segment that has been identified based on how the Company's chief operating decision maker manages the Company's business (see Note 1).

NCS Multistage Holdings, Inc.
Notes to Consolidated Financial Statements
For the Years Ended December 31, 2016 and 2015
(in thousands, except share and per share data)

Revenue by country for 2016 and 2015 is attributed based on the current billing address of the customer. The following table summarizes revenue by geographic area:

	For The Years Ended	
	December 31, 2016	December 31, 2015
United States		
Product sales	$ 17,595	$ 24,857
Services	4,747	8,645
Total United States	22,342	33,502
Canada		
Product sales	53,088	53,108
Services	16,994	21,801
Total Canada	70,082	74,909
Other Countries		
Product sales	2,537	2,114
Services	3,518	3,480
Total Other Countries	6,055	5,594
Total		
Product sales	73,220	80,079
Services	25,259	33,926
Total	$ 98,479	$ 114,005

The following table summarizes long-lived assets by geographic area:

	December 31, 2016	December 31, 2015
United States	$ 2,819	$ 3,614
Canada	6,940	6,970
	$ 9,759	$ 10,584

17. Subsequent Events

On February 1, 2017, the Company acquired a 50% interest in Repeat Precision LLC for $5.4 million. Concurrent with entering into the transaction, the previous owner of the 50% interest repaid a $1.0 million promissory note to the Company. Additional disclosure around the Joint Venture have not been presented as the accounting of the business combination has not been finalized.

In addition, to ensure compliance with non-financial covenants per the senior secured credit facility a $3.0 million prepayment was made.

On March 3, 2017, the Company received $0.9 million resulting from an arbitration case that was decided in the Company's favor in February 2017. This will be recorded as other income in the Company's financial statements for the quarter ended March 31, 2017.

On April 13, 2017, the Company's board of directors and stockholders approved an amendment to the amended and restated certificate of incorporation effecting a 3.00 for 1.00 stock split of the Company's issued and outstanding shares of common stock. The stock split was implemented on April 13, 2017. The par value of the common and preferred stock was not adjusted as a result of the stock split. All issued and outstanding share and per share amounts included in the accompanying financial statements have been adjusted to reflect this stock split for all periods presented.

Schedule I-Condensed Financial Information of Registrant

NCS Multistage Holdings, Inc. (Parent Company Only)
Condensed Balance Sheets
(in thousands, except share data)

	December 31, 2016	December 31, 2015
Assets		
Current Assets		
Cash and cash equivalents	$ 131	$ 36
Accounts Receivable	4	—
Total Current Assets	135	36
Noncurrent assets		
Investment in subsidiaries	169,889	181,074
Loans to subsidiary companies	6,723	5,623
Long term note receivable	751	755
Total Non-Current Assets	177,363	187,452
Total Assets	$ 177,498	$ 187,488
Liabilities and Stockholders' Equity		
Current Liabilities		
Accrued expenses	$ 20	$ 19
Total Other Current Liabilities	20	19
Total Liabilities	20	19
Stockholders' Equity		
Preferred stock, $.01 par value, 1 share authorized issued, and outstanding as of December 31, 2016 and 2015, respectively.	—	—
Common stock, $.01 par value, 54,000,000 shares authorized, 34,024,326 shares issued and 34,005,978 shares outstanding at December 31, 2016 and 45,000,000 shares authorized and 34,013,691 shares issued and outstanding at December 31, 2015.	340	340
Additional paid-in capital	237,566	236,110
Accumulated other comprehensive loss	(82,015)	(88,670)
Retained earnings	21,762	39,689
Treasury Stock	(175)	—
Total Stockholders' Equity	177,478	187,469
Total Liabilities & Stockholders' Equity	$ 177,498	$ 187,488

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

Schedule I-Condensed Financial Information of Registrant

NCS Multistage Holdings, Inc. (Parent Company Only)
Condensed Statements Of Operations
(in thousands)

	Year Ended December 31, 2016	Year Ended December 31, 2015
Equity in net income of subsidiaries	$ (17,840)	$ 28,122
Other expense (loss)	(87)	(97)
Net income (loss)	$ (17,927)	$ 28,025

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

Schedule I-Condensed Financial Information of Registrant

NCS Multistage Holdings, Inc. (Parent Company Only)
Condensed Statements of Consolidated Comprehensive Loss
(in thousands)

	Year Ended December 31 2016	Year Ended December 31 2015
Net Income (loss)	$ (17,927)	$ 28,025
Foreign currency translation adjustments	6,655	(43,280)
Comprehensive (loss)	$ (11,272)	$ (15,255)

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

Schedule I-Condensed Financial Information of Registrant

NCS Multistage Holdings, Inc. (Parent Company Only)
Condensed Statements of Cash Flows
(in thousands except share data)

	For The Years Ended	
	December 31, 2016	December 31, 2015
Cash flows from operating activities		
Net (loss) income	$ (17,927)	$ 28,025
Adjustments to reconcile net loss to net cash provided by (used) in		
Equity in net income of subsidiaries	17,840	(28,122)
Accrued expenses	80	97
Net cash used in operating activities	(7)	(0)
Cash flows from investing activities		
Investment in Subsidiaries		(40,000)
Issuance of note receivable—related party	—	(755)
Net cash used in investing activities	—	(40,755)
Cash flows from financing activities		
Contributions from shareholders	102	39,999
Net cash provided by financing activities	102	39,999
Net change in cash and cash equivalents	95	(756)
Cash and cash equivalents		
Beginning of year	36	792
End of year	$ 131	$ 36

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

Schedule I-Condensed Financial Information of Registrant

NCS Multistage Holdings, Inc. (Parent Company Only)
Notes to Condensed Financial Statements
(in thousands, except share and per share data)

Note 1. Background and basis of presentation

NCS Multistage Holdings, Inc. (the "Parent Company") is a holding company that conducts substantially all of its business operations through its subsidiaries. The ability of the Parent Company's subsidiaries to pay dividends is currently restricted by the terms of its credit agreement with a group of financial institutions. Substantially all of the net assets of the Parent Company's consolidary subsidiaries are restricted.

The accompanying condensed financial information includes the accounts of the Parent Company and, on an equity method basis, its investment in subsidiaries. Accordingly, these condensed financial statements have been presented on a "parent only" basis. These parent only financial statements should be read in conjunction with NCS Multistage Holdings, Inc. audited consolidated financial statements and related notes thereto included elsewhere herein.

The condensed parent-only financial statements have been prepared in accordance with Rule 12-04, Schedule I of Regulation S-X as the restricted net assets of the subsidiaries of the Parent Company exceeds 25% of the consolidated net assets of the Parent Company. The ability of the Parent Company's operating subsidiaries to pay dividends may be restricted due to terms of the subsidiaries financing arrangements (see Note 8 to the consolidated financial statements).

Note 2. Related Party Transactions

As of December 31, 2016 and December 31, 2015, the Company held a long-term note receivable in the amount of approximately $750 due from a related party. The terms of the agreement call for a maturity date of December 31, 2020 with interest due at a rate of 1.67% compounded semi-annually beginning on January 1, 2016. We purchased services and grease in the amount of approximately $49 and $59 from a related party in the years ended December 31, 2016 and 2015, respectively.

As of December 31, 2016, the Parent Company has total subsidiary loans between the subsidiaries and the Parent Company in the amount of approximately $6.7 million.

Note 3. Commitments and Contingencies

For discussion of the commitments and contingencies of the subsidiaries of the Parent Company see Note 9 to the consolidated financial statements.

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PART II—INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all costs and expenses, other than the underwriting discount, paid or payable by us in connection with the sale of the common stock being registered. All amounts shown are estimates except for the SEC registration fee, the FINRA filing fee and the listing fee for NASDAQ.

	Amount Paid or to be Paid
SEC registration fee	$ 22,792
FINRA filing fee	15,500
NASDAQ listing fee	150,000
Blue sky qualification fees and expenses	—
Printing and engraving expenses	575,000
Legal fees and expenses	1,500,000
Accounting fees and expenses	200,000
Transfer agent and registrar fees and expenses	5,000
Miscellaneous expenses	50,000
Total	$ 2,533,292

Item 14. Indemnification of Officers and Directors.

The Registrant is governed by the Delaware General Corporation Law, or DGCL. Section 145 of the DGCL provides that a corporation may indemnify any person, including an officer or director, who was or is, or is threatened to be made, a party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was or is an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, the corporation's best interest and, for criminal proceedings, had no reasonable cause to believe that such person's conduct was unlawful. A Delaware corporation may indemnify any person, including an officer or director, who was or is, or is threatened to be made, a party to any threatened, pending or contemplated action or suit by or in the right of such corporation, under the same conditions, except that such indemnification is limited to expenses (including attorneys' fees) actually and reasonably incurred by such person, and except that no indemnification is permitted without judicial approval if such person is adjudged to be liable to such corporation. Where an officer or director of a corporation is successful, on the merits or otherwise, in the defense of any action, suit or proceeding referred to above, or any claim, issue or matter therein, the corporation must indemnify that person against the expenses (including attorneys' fees) which such officer or director actually and reasonably incurred in connection therewith.

The Registrant's amended and restated bylaws will authorize the indemnification of its officers and directors, consistent with Section 145 of the DGCL, as amended. The Registrant intends to enter into indemnification agreements with each of its directors and executive officers. These agreements, among other things, will require the Registrant to indemnify each director and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of the Registrant, arising out of the person's services as a director or executive officer.

Reference is made to Section 102(b)(7) of the DGCL, which enables a corporation in its original certificate of incorporation or an amendment thereto to eliminate or limit the personal liability of a director for violations of the director's fiduciary duty, except (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL, which provides for liability of directors for unlawful payments of dividends of unlawful stock purchase or redemptions or (iv) for any transaction from which a director derived an improper personal benefit.

The Registrant expects to maintain standard policies of insurance that provide coverage (i) to its directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (ii) to the Registrant with respect to indemnification payments that it may make to such directors and officers.

The proposed form of Underwriting Agreement to be filed as Exhibit 1.1 to this Registration Statement provides for indemnification to the Registrant's directors and officers by the underwriters against certain liabilities.

Item 15. Recent Sales of Unregistered Securities

The following sets forth information regarding all unregistered securities sold by the Registrant in transactions that were exempt from the requirements of the Securities Act in the last three years:

- In April 2014, the Registrant issued 5,931 shares of common stock at a purchase price of $22.76 per share and granted options to purchase an aggregate of 30,000 shares of common stock at an initial strike price of $22.76 per share, which was subsequently adjusted to $18.11 per share, to John Ravensbergen.
- In July 2014, the Registrant granted options to purchase an aggregate of 39,000 shares of common stock at an initial strike price of $22.76 per share, which was subsequently adjusted to $18.11 per share, to Ryan Hummer.
- In October 2014, the Registrant issued 27,606 shares of common stock at a purchase price of $18.11 to Ryan Hummer.
- In May 2015, the Registrant granted options to purchase 18,612 and 15,399 shares of common stock at a strike price of $11.82 per share, to Roger Dwyer and an employee, respectively.
- In December 2015, the Registrant granted options to purchase an aggregate of 8,289 shares of common stock at a strike price of $0.003 per share, to certain employees.
- In December 2015, in connection with the Registrant entering into the Subscription Agreement with the Advent Funds, the Registrant issued to Advent and certain stockholders and members of management of the Registrant consisting of Robert Nipper, Tim Willems, Wade Bitter, John Ravensbergen, Dustin Ellis Ryan Hummer and Mike McKown, an aggregate of 4,179,174 shares of common stock at a purchase price of $9.55 per share.
- In January 2016, the Registrant issued 5,235 shares of common stock at a purchase price of $9.55 per share, to a former employee.
- In April 2016, the Registrant granted options to purchase 6,150, 4,500 and 18,843 shares of common stock at a strike price of $9.55 per share, to Don Battenfelder, Shawn Leggett and a certain employee.
- In July 2016, the Registrant issued 5,400 shares of common stock at a purchase price of $9.55 per share and granted options to purchase an aggregate of 23,553 shares of common stock at a strike price of $9.55 per share, to Kevin Trautner.
- In August 2016, the Registrant granted options to purchase an aggregate of 17,835 shares of common stock at a strike price of 9.81 per share, to Richard Finney.

The shares of common stock in all of the transactions listed above were issued or will be issued in reliance upon Section 4(2) of the Securities Act or Rule 701 promulgated under Section 3(b) of the Securities Act as the sale of such securities did not or will not involve a public offering. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with the Registrant, to information about the Registrant.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits:

Exhibit No.	Description
1.1	Form of Underwriting Agreement.
3.1**	Amended and Restated Certificate of Incorporation of NCS Multistage Holdings, Inc.
3.2**	Certificate of Amendment to Amended and Restated Certificate of Incorporation of NCS Multistage Holdings, Inc.
3.3**	Bylaws of NCS Multistage Holdings, Inc.
3.4	Form of Amended and Restated Certificate of Incorporation of NCS Multistage Holdings, Inc. to be in effect prior to the consummation of the offering made under this Registration Statement.
3.5	Form of Amended and Restated Bylaws of NCS Multistage Holdings, Inc. to be in effect prior to the consummation of the offering made under this Registration Statement.
4.1	Form of Registration Rights Agreement.
5.1	Opinion of Weil, Gotshal & Manges, LLP.
10.1	Form of NCS Multistage Holdings, Inc. 2017 Equity Incentive Plan (“2017 Equity Incentive Plan”).
10.2**	Subscription Agreement, dated as of December 22, 2015, by and between NCS Multistage Holdings, Inc. (formerly known as Pioneer Super Holdings, Inc.) and Advent-NCS Acquisition Limited Partnership.
10.3**	Amended and Restated Employment Agreement between NCS Multistage Holdings, Inc. and Robert Nipper, dated as of February 1, 2017.
10.4**	Amended and Restated Employment Agreement between NCS Multistage Holdings, Inc. and Tim Willems, dated as of February 1, 2017.
10.5**	Amended and Restated Employment Agreement between NCS Multistage Holdings, Inc. and Wade Bitter, dated as of February 1, 2017.
10.6	Form of Director Indemnification Agreement.
10.7**	Credit Agreement, dated as of August 7, 2014 (the “Credit Agreement”), by and between Pioneer Intermediate, Inc., as parent, Pioneer Investment, Inc., as borrower, Wells Fargo Bank, National Association, as administrative agent, swingline lender and an issuing lender, HSBC Bank Canada, as an issuing lender, and the lenders named therein.
10.8**	Agreement and Amendment No. 1 to the Credit Agreement.
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10.10	Form of Director Restricted Stock Unit Award Agreement under the 2017 Equity Incentive Plan.
10.11**	Form of 2012 Equity Incentive Plan (“2012 Equity Incentive Plan”) of NCS Multistage Holdings, Inc. (formerly known as Pioneer Super Holdings, Inc.).
10.12**	Form of Stock Option Award Agreement under the 2012 Equity Incentive Plan.
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10.14	Form of Stock Option Award Agreement under the 2017 Equity Incentive Plan for non-executive employees.

Exhibit No.	Description
10.15	Exchange Agreement, dated as of December 20, 2012, by and between NCS Energy Holdings, LLC, NCS Multistage Inc. (formerly known as NCS Oilfield Service Canada, Inc.), Cemblend Systems Inc. and NCS Multistage Holdings, Inc. (formerly known as Pioneer Super Holdings, Inc.).
10.16	Call Rights Agreement, dated as of December 20, 2012, by and between NCS Energy Holdings, LLC, NCS Multistage Inc. (formerly known as NCS Oilfield Service Canada, Inc.), Cemblend Systems Inc. and NCS Multistage Holdings, Inc. (formerly known as Pioneer Super Holdings, Inc.).
21.1**	List of subsidiaries.
23.1	Consent of PricewaterhouseCoopers LLP.
23.2	Consent of Weil, Gotshal & Manges, LLP (included in Exhibit 5.1).
24.1**	Power of Attorney (included on signature page).

* To be filed by amendment.
** Previously filed.

(b) Financial Statement Schedules

Schedule I—Condensed Financial Information of NCS Multistage Holdings, Inc.

Item 17. Undertakings

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) For the purposes of determining liability under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser.

(a) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(b) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(c) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(d) Any other communication that is an offer in the offering made by the undersigned registrant to be purchaser.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Houston, State of Texas, on April 17, 2017.

NCS Multistage Holdings, Inc.

By: /s/ Robert Nipper
Name: Robert Nipper
Title: Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated on April 17, 2017.

Signature	Title
/s/ Robert Nipper Robert Nipper	Chief Executive Officer and Director (Principal Executive Officer)
* Marty Stromquist	President and Director
/s/ Ryan Hummer Ryan Hummer	Chief Financial Officer (Principal Financial Officer)
/s/ Wade Bitter Wade Bitter	Chief Accounting Officer and Treasurer (Principal Accounting Officer)
* Michael McShane	Chairman
* John Deane	Director
* Matthew Fitzgerald	Director
* Gurinder Grewal	Director
* David McKenna	Director
* Franklin Myers	Director
/s/ W. Matt Ralls W. Matt Ralls	Director

*By: /s/ Ryan Hummer
Ryan Hummer
Attorney-in-Fact

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EXHIBIT INDEX

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23.2	Consent of Weil, Gotshal & Manges, LLP (included in Exhibit 5.1).
24.1**	Power of Attorney (included on signature page).

** Previously filed.

Exhibit 1.1

[ ] Shares

NCS MULTISTAGE HOLDINGS, INC.

Common Stock

UNDERWRITING AGREEMENT

[ ], 2017

CREDIT SUISSE SECURITIES (USA) LLC
CITIGROUP GLOBAL MARKETS INC.
WELLS FARGO SECURITIES, LLC
As Representatives of the Several Underwriters,

c/o Credit Suisse Securities (USA) LLC
Eleven Madison Avenue
New York, New York 10010

c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York 10013

c/o Wells Fargo Securities, LLC
375 Park Avenue, 4th Floor
New York, New York 10152

Dear Sirs:

1. *Introductory*. NCS Multistage Holdings, Inc., a Delaware corporation ("**Company**"), agrees with the several Underwriters named in Schedule A hereto ("Underwriters") to issue and sell to the several Underwriters [ ] shares (the "**Firm Securities**") of its common stock, par value $0.01 per share ("**Securities**"). The stockholders listed in Schedule B hereto (collectively, "**Selling Stockholders**") agree to sell to the Underwriters, at the option of the Underwriters, an aggregate of not more than [ ] additional outstanding shares of the Securities (such [ ] aggregate shares of the Securities being hereinafter referred to as the "**Optional Securities**"), as set forth in Section 3 of this Agreement. The Firm Securities and the Optional Securities are herein collectively called the "**Offered Securities**." As part of the offering contemplated by this Agreement, Wells Fargo Securities, LLC (the "**Designated Underwriter"**) has agreed to reserve out of the Firm Securities purchased by it under this Agreement, up to [ ] shares, for sale to the Company's directors and other parties associated with the Company (collectively, "**Participants**"), as set forth in the Final Prospectus (as defined herein) under the heading "Underwriting" (the "**Directed Share Program"**). The Firm Securities to be sold by the Designated Underwriter pursuant to the Directed Share Program (the "**Directed Shares"**) will be sold by the Designated Underwriter pursuant to this Agreement at the public offering price. Any Directed Shares not subscribed for by the end of the business day on which this Agreement is executed will be offered to the public by the Underwriters as set forth in the Final Prospectus.

2. *Representations and Warranties of the Company and the Selling Stockholders*.

(a) The Company represents and warrants to, and agrees with, the several Underwriters that:

(i) *Filing and Effectiveness of Registration Statement; Certain Defined Terms*. The Company has filed with the Commission a registration statement on Form S-1 (No. 333-216580) covering the registration of the Offered Securities under the Act, including a related preliminary prospectus or prospectuses. At any particular time, this initial registration statement, in the form then on file with the Commission, including all information contained in the registration statement (if any) pursuant to Rule 462(b) and then deemed to be a part of the initial registration statement, and all 430A Information and all 430C Information, that in any case has not then been superseded or modified, shall be referred to as the "**Initial Registration Statement**". The Company may also have filed, or may file with the Commission, a Rule 462(b) registration statement covering the registration of the Offered Securities. At any particular time, this Rule 462(b) registration statement, in the form then on file with the Commission, including the contents of the Initial Registration Statement incorporated by reference therein and including all 430A Information and all 430C Information, that in any case has not then been superseded or modified, shall be referred to as the "**Additional Registration Statement**."

As of the time of execution and delivery of this Agreement, the Initial Registration Statement has been declared effective under the Act and is not proposed to be amended. Any Additional Registration Statement has or will become effective upon filing with the Commission pursuant to Rule 462(b) and is not proposed to be amended. The Offered Securities all have been or will be duly registered under the Act pursuant to the Initial Registration Statement and, if applicable, the Additional Registration Statement.

For purposes of this Agreement:

"**430A Information**," with respect to any registration statement, means information included in a prospectus and retroactively deemed to be a part of such registration statement pursuant to Rule 430A(b).

"**430C Information**," with respect to any registration statement, means information included in a prospectus then deemed to be a part of such registration statement pursuant to Rule 430C.

"**Act**" means the Securities Act of 1933, as amended.

"**Applicable Time**" means [ ] [a/p]m (Eastern time) on the date of this Agreement.

"**Closing Date"** has the meaning defined in Section 3 hereof.

"**Commission**" means the Securities and Exchange Commission.

"**Effective Time**" with respect to the Initial Registration Statement or, if filed prior to the execution and delivery of this Agreement, the Additional Registration Statement means the date and time as of which such Registration Statement was declared effective by the Commission or has become effective upon filing pursuant to Rule 462(c). If an Additional Registration Statement has not been filed prior to the execution and delivery of this Agreement but the Company has advised the Representatives that it proposes to file one, "**Effective Time**" with respect to such Additional Registration Statement means the date and time as of which such Registration Statement is filed and becomes effective pursuant to Rule 462(b).

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

"**Final Prospectus**" means the Statutory Prospectus that discloses the public offering price, other 430A Information and other final terms of the Offered Securities and otherwise satisfies Section 10(a) of the Act.

"**General Use Issuer Free Writing Prospectus**" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors, as evidenced by its being so specified in Schedule C to this Agreement.

"**Issuer Free Writing Prospectus**" means any "issuer free writing prospectus," as defined in Rule 433, relating to the Offered Securities in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

"**Limited Use Issuer Free Writing Prospectus**" means any Issuer Free Writing Prospectus that is not a General Use Issuer Free Writing Prospectus.

The Initial Registration Statement and the Additional Registration Statement are referred to collectively as the "**Registration Statements**" and individually as a "**Registration Statement**". A "**Registration Statement**" with reference to a particular time means the Initial Registration Statement and any Additional Registration Statement as of such time. A "**Registration Statement**" without reference to a time means such Registration Statement as of its Effective Time. For purposes of the foregoing definitions, 430A Information with respect to a Registration Statement shall be considered to be included in such Registration Statement as of the time specified in Rule 430A.

"**Representatives**" means Credit Suisse Securities (USA) LLC, Citigroup Global Markets Inc. and Wells Fargo Securities, LLC.

"**Rules and Regulations**" means the rules and regulations of the Commission.

"**Securities Laws**" means, collectively, the Sarbanes-Oxley Act of 2002 ("**Sarbanes-Oxley**"), the Act, the Exchange Act, the Rules and Regulations, the auditing principles, rules, standards and practices applicable to auditors of "issuers" (as defined in Sarbanes-Oxley) promulgated or approved by the Public Company Accounting Oversight Board and, as applicable, the rules of the NASDAQ Stock Market ("**Exchange Rules**").

"**Statutory Prospectus**" with reference to a particular time means the prospectus included in a Registration Statement immediately prior to that time, including any

430A Information or 430C Information with respect to such Registration Statement. For purposes of the foregoing definition, 430A Information shall be considered to be included in the Statutory Prospectus as of the actual time that form of prospectus is filed with the Commission pursuant to Rule 424(b) or Rule 462(c) and not retroactively.

"**Testing-the-Waters Communication**" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Act.

"**Written Testing-the-Waters Communication**" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Act.

Unless otherwise specified, a reference to a "rule" is to the indicated rule under the Act.

(ii) *Compliance with the Requirements of the Act*. (i) (A) At their respective Effective Times, (B) on the date of this Agreement and (C) on each Closing Date, each of the Initial Registration Statement and the Additional Registration Statement (if any) conformed and will conform in all material respects to the requirements of the Act and the Rules and Regulations and did not and will not include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) on its date, at the time of filing of the Final Prospectus pursuant to Rule 424(b) or (if no such filing is required) at the Effective Time of the Additional Registration Statement in which the Final Prospectus is included, and on each Closing Date, the Final Prospectus will conform in all material respects to the requirements of the Act and the Rules and Regulations and will not include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and (iii) on the date of this Agreement, at their respective Effective Times or issue dates and on each Closing Date, each Registration Statement, the Final Prospectus, any Statutory Prospectus, any prospectus wrapper and any Issuer Free Writing Prospectus complied or comply, and such documents and any further amendments or supplements thereto will comply, with any applicable laws or regulations of foreign jurisdictions in which the Final Prospectus, any Statutory Prospectus, any prospectus wrapper or any Issuer Free Writing Prospectus, as amended or supplemented, if applicable, are distributed in connection with the Directed Share Program. The preceding sentence does not apply to statements in or omissions from any such document based upon written information furnished to the Company by any Underwriter through the Representatives specifically for use therein, it being understood and agreed that the only such information is that described as such in Section 8(c) hereof, or any written information furnished to the Company by a Selling Stockholder expressly for use therein, it being understood and agreed that the only such information is that described as such in Section 8(b) hereof.

(iii) *Ineligible Issuer Status.* (i) At the time of the initial filing of the Initial Registration Statement and (ii) at the date of this Agreement, the Company was not and is not an "ineligible issuer," as defined in Rule 405, including (x) the Company or any subsidiary of the Company in the preceding three years not having been convicted of a felony or misdemeanor or having been made the subject of a judicial or administrative decree or order as described in Rule 405 and (y) the Company in the preceding three years not having been the subject of a bankruptcy petition or insolvency or similar proceeding, not having had a registration statement be the subject of a proceeding under Section 8 of the Act and not being the subject of a proceeding under Section 8A of the Act in connection with the offering of the Offered Securities, all as described in Rule 405.

(iv) *Emerging Growth Company Status*. From the time of the initial confidential submission of the Initial Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any Testing-the-Waters Communication) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Act (an "**Emerging Growth Company**").

(v) *Filing Fees*. The Company has paid or shall pay the required Commission filing fees relating to the Offered Securities within the time required by Rule 456 and otherwise in accordance with Rules 456 and 457.

(vi) *General Disclosure Package*. As of the Applicable Time, none of (i) the General Use Issuer Free Writing Prospectus(es) issued at or prior to the Applicable Time, the preliminary prospectus, dated [ ], 2017 (which is the most recent Statutory Prospectus distributed to investors generally) and the other information, if any, stated in Schedule C to this Agreement to be included in the General Disclosure Package, all considered together (collectively, the "**General Disclosure Package**"), (ii) any individual Limited Use Issuer Free Writing Prospectus, when considered together with the General Disclosure Package, or (iii) any individual Written Testing-the-Waters Communication, when considered together with the General Disclosure Package, included any untrue statement of a material fact or omitted to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The preceding sentence does not apply to statements in or omissions from any Statutory Prospectus, any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representatives specifically for use therein, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 8(c) hereof, or any written information furnished to the Company by a Selling Stockholder expressly for use therein, it being understood and agreed that the only such information is that described as such in Section 8(b) hereof.

(vii) *Issuer Free Writing Prospectuses*. Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Offered Securities or until any earlier date that the Company notified or notifies the Representatives as described in the next sentence, did not, does not and will not include any information that conflicted, conflicts or will conflict with the information then contained in the Registration Statement. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information then contained in the Registration Statement or as a result of which such Issuer Free Writing Prospectus, if republished immediately following such event or development, would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, (i) the Company has promptly notified or will promptly notify the Representatives and (ii) the Company has promptly amended or will promptly amend or supplement such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(viii) *Testing-the-Waters Communication*. The Company (a) has not alone engaged in any Testing-the-Waters Communication and (b) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communication. The Company has not distributed any Written Testing-the-Waters Communication.

(ix) *Good Standing of the Company.* The Company has been duly incorporated and is existing and in good standing under the laws of the State of Delaware, with power and authority (corporate and other) to own and/or lease its properties and conduct its business as described in the General Disclosure Package and the Final Prospectus; and the Company is duly qualified to do business as a foreign corporation in good standing in all other jurisdictions in which its ownership or lease of property or the conduct of its business requires such qualification, except where the failure to be so qualified or in good standing (to the extent the concept of good standing is applicable in such jurisdiction) would not reasonably be expected to, individually or in the aggregate, result in a material adverse effect on the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries taken as a whole (a "**Material Adverse Effect**")**.**

(x) *Subsidiaries.* Each subsidiary of the Company that meets the definition in Rule 1-02(w) of Regulation S-X has been duly incorporated or formed and is existing and in good standing (to the extent the concept of good standing is applicable in such jurisdiction) under the laws of the jurisdiction of its incorporation or formation, with power and authority (corporate and other) to own and/or lease its properties and conduct its business as described in the General Disclosure Package and the Final Prospectus; and each subsidiary of the Company is duly qualified to do business as a foreign corporation, limited liability company or other entity in good standing in all other jurisdictions in which its ownership or lease of property or the conduct of its business requires such qualification, except where the failure to be so qualified or in good standing (to the extent the concept of good standing is applicable in such jurisdiction) would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect; all of the issued and outstanding capital stock, limited liability company interests or other ownership interests of each subsidiary of the Company have been duly authorized and validly issued and is fully paid and nonassessable; and, except as disclosed in the General Disclosure Package and the Final Prospectus, the capital stock or other equity interests of each subsidiary owned by the Company, directly or through subsidiaries, is owned free from liens, encumbrances and defects. The subsidiaries of the Company listed on Schedule D of this Agreement are the only subsidiaries, direct or indirect, of the Company and except as disclosed in the General Disclosure Package and the Final Prospectus, each subsidiary of the Company is a wholly-owned subsidiary, direct or indirect, of the Company.

(xi) *Offered Securities*. The Offered Securities and all other outstanding shares of capital stock of the Company have been duly authorized; the authorized equity capitalization of the Company is as set forth in the General Disclosure Package; all outstanding shares of capital stock of the Company are, and, when the Offered Securities have been delivered and paid for in accordance with this Agreement on each Closing Date, such Offered Securities will have been, validly issued, fully paid and nonassessable, and will conform to the information in the General Disclosure Package and to the description of such Offered Securities contained in the Final Prospectus; except as disclosed in the General Disclosure Package and the Final Prospectus, the stockholders of the Company have no preemptive rights with respect to the Securities; and none of the outstanding shares of capital stock of the Company have been issued in violation of any preemptive or similar rights of any security holder. The Company has not, directly or indirectly, offered or sold any of the Offered Securities by means of any "prospectus" (within the meaning of the Act and the Rules and Regulations) or used any "prospectus" or made any offer (within the meaning of the Act and the Rules and Regulations) in connection with the offer or sale of the Offered Securities, in each case other than the preliminary prospectus referred to in Section 2(a)(vi) hereof.

(xii) *No Finder's Fee.* Except as disclosed in the General Disclosure Package and the Final Prospectus, there are no contracts, agreements or understandings between the Company and any person that would give rise to a valid claim against the Company or any Underwriter for a brokerage commission, finder's fee or other like payment in connection with this offering.

(xiii) *Registration Rights.* Except as disclosed in the General Disclosure Package and the Final Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Act with respect to any securities of the Company owned or to be owned by such person or to require the Company to include such securities in the securities registered pursuant to a Registration Statement or in any securities being registered pursuant to any other registration statement filed by the Company under the Act (collectively, "registration rights"), and any person to whom the Company has granted registration rights has agreed not to exercise such rights until after the expiration of the Lock-Up Period referred to in Section 5(1) hereof.

(xiv) *Listing.* The Offered Securities have been approved for listing on the NASDAQ Global Select Market, subject to notice of issuance.

(xv) *Absence of Further Requirements.* No consent, approval, authorization, or order of, or filing or registration with, any person (including any governmental agency or body or any court) is required to be obtained or made by the Company for the consummation of the transactions contemplated by this Agreement in connection with the sale of the Offered Securities, except such as have been obtained, or made and such as may be required under state securities laws or by the Financial Industry Regulatory Authority, Inc. ("**FINRA**"). No authorization, consent, approval, license, qualification or order of, or filing or registration with any person (including any governmental agency or body or any court) in any foreign jurisdiction is required for the consummation of the transactions contemplated by this Agreement in connection with the offering, issuance and sale of the Directed Shares under the laws and regulations of such jurisdiction except such as have been obtained or made.

(xvi) *Title to Property*. Except as disclosed in the General Disclosure Package and the Final Prospectus, the Company and its subsidiaries have good and marketable title to all real properties and all other properties and assets owned by them which are material to the business of the Company and its subsidiaries, in each case, except as disclosed in the General Disclosure Package and the Final Prospectus, free and clear from all liens, charges, encumbrances and defects that would materially affect the value thereof or materially interfere with the use made or to be made thereof by them and, except as disclosed in the General Disclosure Package and the Final Prospectus, the Company and its subsidiaries hold any leased real or personal property under valid and enforceable leases with no terms or provisions that would materially interfere with the use made or to be made thereof by them.

(xvii) *Absence of Defaults and Conflicts Resulting from Transaction.* The execution, delivery and performance of this Agreement, and the issuance and sale of the Offered Securities will not (i) result in a breach of any of the terms and provisions of, or constitute a default or a Debt Repayment Triggering Event (as defined below) under, or result in the imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, any indenture, loan agreement, mortgage, lease or other agreement or instrument to which any of them is a party or by which any of them is bound or to which any of the properties of any of them is subject, (ii) result in any violation of the provisions of the charter, by-laws or similar organizational documents of the Company or any of its subsidiaries or (iii) result in the violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority having jurisdiction over the Company or any of its subsidiaries, except, in the cases of clauses (i) or (iii) above, for any such conflict, breach, lien, charge, encumbrance, violation or default that would not, individually or in the aggregate, reasonably be expected to have a (a) material adverse effect on the performance of this Agreement or the consummation of any of the transactions contemplated hereby or (b) Material Adverse Effect. A "**Debt Repayment Triggering Event**" means any event or condition that gives, or with the giving of notice or lapse of time would give, the holder of any note, debenture, or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.

(xviii) *Absence of Existing Defaults and Conflicts.* Neither the Company nor any of its subsidiaries is in violation of its respective charter, by-laws or similar organizational document or in default (or with the giving of notice or lapse of time would be in default) under any existing obligation, agreement, covenant or condition contained in any indenture, loan agreement, mortgage, lease or other agreement or instrument to which any of them is a party or by which any of them is bound or to which any of the properties of any of them is subject, except such defaults that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(xix) *Authorization of Agreement.* This Agreement has been duly authorized, executed and delivered by the Company.

(xx) *Possession of Licenses and Permits.* The Company and its subsidiaries possess, and are in compliance with the terms of, all adequate certificates, authorizations, franchises, licenses and permits ("**Licenses**") necessary or material to the conduct of the business now conducted or proposed in the General Disclosure Package and the Final Prospectus to be conducted by them

and have not received any notice of proceedings relating to the revocation or modification of any Licenses that, if determined adversely to the Company or any of its subsidiaries, would individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(xxi) *Absence of Labor Dispute.* No labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is imminent that would reasonably be expected to have a Material Adverse Effect.

(xxii) *Intellectual Property Rights* Except as disclosed in the General Disclosure Package and the Final Prospectus (i) to the Company's knowledge, there are no rights of third parties to any of the trademarks, trade names, patent rights, copyrights, domain names, trade secrets, know-how and other intellectual property rights, including registrations and applications for registration thereof (collectively, "**Intellectual Property Rights**") owned by the Company or its subsidiaries, other than pursuant to licenses granted in the ordinary course of business; (ii) to the Company's knowledge, there is no material infringement, misappropriation, or other violation by the Company or its subsidiaries of any Intellectual Property Rights of any third parties, and the Company is unaware of any other fact which would form a reasonable basis for any such claim; (iii) to the Company's knowledge, there is no material infringement, misappropriation, or other violation, by any third parties of any of the Intellectual Property Rights of the Company or its subsidiaries; (iv) to the Company's knowledge, there is no pending or threatened action, suit, proceeding or claim by others challenging the Company's or any subsidiary's rights in or to the Company's Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (v) to the Company's knowledge, there is no pending or threatened action, suit, proceeding or claim by others challenging the validity, enforceability or scope of any of the Company's Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim; and (vi) none of the Intellectual Property Rights used by the Company or its subsidiaries in their businesses as now conducted has been obtained or is being used by the Company or its subsidiaries in violation of any contractual obligation binding on the Company or such subsidiaries, as applicable, or in violation of the rights of any persons, except in each case covered by clauses (i) – (vi) such as would not, if determined adversely to the Company or any of its subsidiaries, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(xxiii) *Environmental Laws.* Except as disclosed in the General Disclosure Package and the Final Prospectus, (a) neither the Company nor any of its subsidiaries (i) is or has been in violation of any foreign, federal, state or local statute, law, rule, regulation, judgment, order, decree, decision, ordinance, code or other legally binding requirement (including common law) relating to the pollution, protection or restoration of the environment, wildlife or natural

resources; human health or safety; or the generation, use, handling, transportation, treatment, storage, discharge, disposal or release of, or exposure to, any Hazardous Substance (as defined below) (collectively, "**Environmental Laws**"), (ii) is conducting or funding, in whole or in part, any investigation, remediation, monitoring or other corrective action pursuant to any Environmental Law, including to address any actual or suspected Hazardous Substance present in the environment at concentrations in excess of those permitted under applicable Environmental Laws, (iii) has received notice of, or is subject to any action, suit, claim or proceeding alleging, any actual or potential liability under, or violation of, any Environmental Law, (iv) is party to any order, decree or agreement that imposes any obligation or liability under any Environmental Law, or (v) is or has been in violation of, or has failed to obtain and maintain, any permit, license, authorization, identification number or other approval required under applicable Environmental Laws; (b) to the knowledge of the Company, there are no facts or circumstances that would result in the Company or any of its subsidiaries being cited for any violation of or incurring liability under any Environmental Law, including with respect to any Hazardous Substance, except in the case of clause (a) and (b) above, for such matters as would not individually or in the aggregate have a Material Adverse Effect; and (c) neither the Company nor any of its subsidiaries (i) is subject to any pending proceeding pursuant to any Environmental Law in which any foreign, federal, state or local governmental entity is also a party, other than such proceedings regarding which it is reasonably believed no monetary sanctions of $100,000 or more will be imposed, nor does the Company or any of its subsidiaries know any such proceeding is contemplated, (ii) is aware of any material effect on the capital expenditures, earnings or competitive position of the Company and its subsidiaries resulting from compliance with Environmental Laws, or (iii) anticipates any material capital expenditures relating to any Environmental Laws. For purposes of this subsection, "**Hazardous Substance**" means (A) any pollutant, contaminant, petroleum and petroleum products, petroleum by-products or breakdown products, radioactive materials, asbestos, asbestos-containing materials, polychlorinated biphenyls or toxic mold, and (B) any other substance, material or waste defined as "toxic," "hazardous," a "pollutant," a "contaminant," or words of similar meaning and regulatory effect under applicable Environmental Law.

(xxiv) *Accurate Disclosure.* The statements in the General Disclosure Package and the Final Prospectus under the headings "Material U.S. Federal Income and Estate Tax Considerations for Non-U.S. Holders," "Description of Capital Stock," "Business—Environmental and Occupational Health and Safety Matters" and "Certain Relationships and Related Party Transactions" insofar as such statements summarize legal matters, agreements, documents or proceedings discussed therein, are in all material respects accurate and fair summaries of such legal matters, agreements, documents or proceedings and present the information required to be shown.

(xxv) *Absence of Manipulation*. The Company has not taken, directly or indirectly, any action that is designed to or that has constituted or that would reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Offered Securities.

(xxvi) *No Forward-Looking Statements*. No forward-looking statement (within the meaning of Section 27A of the Act and Section 21E of the Exchange Act) contained in the Registration Statement, the General Disclosure Package and the Final Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(xxvii) *Statistical and Market-Related Data.* Any third-party statistical and market-related data included in a Registration Statement, a Statutory Prospectus, the General Disclosure Package or any Written Testing-the-Waters Communication is based on or derived from sources that the Company believes to be reliable and accurate in all material respects.

(xxviii) *Internal Controls and Compliance with the Sarbanes-Oxley Act.* Except as set forth in the General Disclosure Package and the Final Prospectus, the Company and its subsidiaries maintain systems of "internal control over financial reporting" (as defined in Rule 13a-15(f) of the Exchange Act) that comply with the requirements of the Exchange Act and have been designed by, or under the supervision of, their principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. General Accepted Accounting Principles ("GAAP"). The Company and its subsidiaries, taken as a whole, maintain a system of internal controls over financial reporting sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as disclosed in the General Disclosure Package and the Final Prospectus, the Company's internal control over financial reporting is effective. Since the end of the Company's most recent audited fiscal year, none of the Company or its subsidiaries is aware, after due inquiry, of any (x) material weakness or significant deficiency (y) significant changes in the Company's internal controls over financing reporting or (z) fraud involving management or other employees who have a significant role in internal controls over financial reporting that has materially affected, or is reasonably likely to affect, the Company's internal control over financing reporting, except, in the cases of clause (x) above, as disclosed in the General Disclosure Package and the Final Prospectus.

(xxix) *Disclosure Controls.* The Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act) that comply with the requirements of the Exchange Act; such disclosure controls and procedures have been designed to ensure that material information relating to the Company and its subsidiaries is made known to the Company's principal executive officer and principal financial officer by others within those entities; and such disclosure controls and procedures are effective.

(xxx) *Litigation*. Except as disclosed in the General Disclosure Package and the Final Prospectus, there are no pending actions, suits or proceedings (including, to the Company's knowledge, any inquiries or investigations by any court or governmental agency or body, domestic or foreign) against or affecting the Company, any of its subsidiaries or any of their respective properties that, if determined adversely to the Company or any of its subsidiaries, would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, or would materially and adversely affect the ability of the Company to perform its obligations under this Agreement, or which are otherwise material in the context of the sale of the Offered Securities; and no such actions, suits or proceedings (including any inquiries or investigations by any court or governmental agency or body, domestic or foreign) are, to the Company's knowledge, threatened or contemplated.

(xxxi) *Financial Statements.* The financial statements included in each Registration Statement, the General Disclosure Package and the Final Prospectus present fairly in all material respects the financial position of the Company and its consolidated subsidiaries as of the dates shown and their results of operations and cash flows for the periods shown, and such financial statements have been prepared in conformity with GAAP applied on a consistent basis and the schedules included in each Registration Statement present fairly the information required to be stated therein. PricewaterhouseCoopers LLP, which has certified the financial statements of the Company included in the General Disclosure Package and the Final Prospectus, is an independent registered public accounting firm with respect to the Company within the Rules and Regulations and as required by the Act and the applicable rules and guidance from the Public Company Accounting Oversight Board (United States).

(xxxii) *No Material Adverse Change in Business.* Except as disclosed in the General Disclosure Package and the Final Prospectus, since the end of the period covered by the latest audited financial statements included in the General Disclosure Package and the Final Prospectus (i) there has been no change, nor any development or event involving a prospective change, in the condition (financial or otherwise), results of operations, business, properties or

prospects of the Company and its subsidiaries, taken as a whole, that is material and adverse, (ii) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock, (iii) there has been no material adverse change in the capital stock, short-term indebtedness, long-term indebtedness, net current assets or net assets of the Company or any of its subsidiaries, (iv) there has been no material transaction entered into and there is no material transaction that is probable of being entered into by the Company or any of its subsidiaries, (v) there has been no obligation, direct or contingent, that is material to the Company or any of its subsidiaries, taken as a whole, incurred by the Company or any of its subsidiaries, except obligations incurred in the ordinary course of business and (vi) neither the Company nor any of its subsidiaries has sustained any loss or interference with its business that is material to the Company and its subsidiaries taken as a whole from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority.

(xxxiii) *Investment Company Act.* The Company is not and, after giving effect to the offering and sale of the Offered Securities and the application of the proceeds thereof as described in the General Disclosure Package and the Final Prospectus, will not be an "investment company" as defined in the Investment Company Act of 1940, as amended (the "**Investment Company Act**").

(xxxiv) *Ratings.* No "nationally recognized statistical rating organization" as such term is defined for purposes of Section 3(a)(62) of the Exchange Act (i) has imposed (or has informed the Company that it is considering imposing) any condition (financial or otherwise) on the Company's retaining any rating assigned to the Company or any securities of the Company or (ii) has indicated to the Company that it is considering any of the actions described in Section 7(c)(ii) hereof.

(xxxv) *Taxes*. The Company and each of its subsidiaries has filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof (except in any case in which the failure to file would not reasonably be expected to have a Material Adverse Effect) and have paid all taxes (including any assessments, fines or penalties) required to be paid thereon (except for cases in which failure to pay would not reasonably be expected to have a Material Adverse Effect, or, except as currently being contested in good faith and for which reserves required by GAAP have been created in the financial statements of the Company), and no material tax deficiency has been asserted against the Company or any of its subsidiaries.

(xxxvi) *No Restrictions on Payments by Subsidiaries*. Except as disclosed in the General Disclosure Package and the Final Prospectus, no subsidiary of the Company is currently prohibited, directly or indirectly, under any agreement or other instrument to which it is a party or is subject, (i) from paying any

dividends to the Company, (ii) from making any other distribution on such subsidiary's equity interests, (iii) from repaying to the Company any loans or advances to such subsidiary from the Company or (iv) from transferring any of such subsidiary's material properties or assets to the Company or any other subsidiary of the Company.

(xxxvii) *ERISA.* The minimum funding standard under Section 302 of the Employee Retirement Income Security Act of 1974, as amended, and the regulations and published interpretations thereunder ("**ERISA**"), or other applicable minimum funding standard, has been satisfied, in all material respects, if applicable, by each "employee benefit plan" (as defined in Section 3(3) of ERISA), whether or not subject to ERISA, with respect to which the Company or any of its subsidiaries could have any material liability (each an "Employee Benefit Plan"), and the trust forming part of each such plan which is intended to be qualified under Section 401 of the Internal Revenue Code of 1986, as amended (the "**Code**"), is so qualified and to the Company's knowledge, nothing has occurred since the date of such qualification which could reasonably be expected to result in the loss of such qualification; each of the Company and its subsidiaries has fulfilled its obligations, if any, under Section 515 of ERISA in all material respects; neither the Company nor any of its subsidiaries maintain or are required to contribute to a "welfare plan" (as defined in Section 3(1) of ERISA) which provides retiree or other post-employment welfare benefits or insurance coverage (other than "continuation coverage" (as defined in Section 602 of ERISA)) that could result in a material liability to the Company; each Employee Benefit Plan is in and has been operated in compliance with all applicable laws, including but not limited to ERISA and the Code, except where the failure to comply would not reasonably be expected to result in a Material Adverse Effect; no event has occurred (including a "reportable event" as such term is defined in Section 4043 of ERISA) and, to the Company's knowledge, no condition exists with respect to each Employee Benefit Plan that would subject the Company or any of its subsidiaries to any material tax, fine, lien, penalty or liability imposed by ERISA or the Code; no non-exempt "prohibited transaction" as defined under Section 406 of ERISA or Section 4975 of the Code has occurred with respect to any Employee Benefit Plan that could result in a material liability to the Company; and neither the Company nor any of its subsidiaries have incurred or would reasonably be expected to incur any withdrawal liability under Section 4201 of ERISA, any liability under Section 4062, 4063 or 4064 of ERISA, or any other liability under Title IV of ERISA that could result in a material liability to the Company.

(xxxviii) *Insurance*. The Company and its subsidiaries are insured by insurers of recognized financial responsibility and in such amounts as the Company reasonably believes are prudent and customary for the businesses in which they are engaged; all material policies of insurance and fidelity or surety bonds insuring the Company or any of its subsidiaries or their respective businesses, assets, employees, officers and directors are in full

force and effect; the Company and its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; and there are no claims by the Company or any of its subsidiaries under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause, the failure of which to receive payment on would reasonably be expected to have a Material Adverse Effect; neither the Company nor any such subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to have a Material Adverse Effect, except as set forth in or contemplated in the General Disclosure Package and the Final Prospectus; and the Company will obtain directors' and officers' insurance in such amounts as is customary for an initial public offering.

(xxxix) *No Unlawful Payments*. Neither the Company nor any of its subsidiaries, nor any director or officer, nor, to the Company's knowledge, any controlled affiliate, employee, agent, representative or other person associated with or acting on behalf of the Company or of any of its subsidiaries or affiliates has (A) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (B) taken or will take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment or giving of money, property, gifts or anything else of value, directly or indirectly, to any "government official" (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) to influence official action or secure an improper advantage; (C) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977 or any other applicable anti-bribery or anti-corruption law; or (D) made, offered, agreed, requested or taken an act in furtherance of any unlawful bribe or other unlawful benefit, including, without limitation, any rebate, payoff, influence payment, kickback or other unlawful or improper payment or benefit. The Company and its subsidiaries and controlled affiliates have conducted their businesses in compliance with the Foreign Corrupt Practices Act of 1977 and all other applicable anti-bribery and anti-corruption laws and have instituted and maintain and will continue to maintain policies and procedures designed to promote compliance with such laws.

(xl) *Compliance with Anti-Money Laundering*. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of all jurisdictions where the

Company and its subsidiaries conduct business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Anti-Money Laundering Laws**"), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(xli) *Economic Sanctions.*

(i) Neither the Company nor any of its subsidiaries, nor any director, officer, thereof, nor, to the Company's knowledge, any agent, controlled affiliate, employee, or representative of the Company or any of its subsidiaries, is an individual or entity ("**Person**") that is, or is owned or controlled by a Person that is:

(A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control (OFAC), the United Nations Security Council (UN), the European Union (EU), the Swiss Secretariat of Economic Affairs (SECO), Her Majesty's Treasury (UK HMT), the Hong Kong Monetary Authority (HKMA), the Monetary Authority of Singapore (MAS) (collectively, "**Sanctions**"), nor

(B) located, organized or resident in a country or territory that is itself the subject of Sanctions (as of the date of this agreement, Crimea, Cuba, Iran, North Korea, Sudan and Syria).

(ii) The Company will not, directly or, to its knowledge, indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person:

(A) to fund or facilitate any activities or business of or with any Person that is, or in any country or territory that is itself, at the time of such funding or facilitation, the subject of Sanctions; or

(B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) For the past five years, the Company and its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not knowingly engage in, any dealings or transactions with any Person that is or was, or in any country or territory that is or was itself, at the time of the dealing or transaction the subject of Sanctions.

(xlii) *Directed Share Program*. None of the Participants is domiciled outside of the United States.

(xliii) *Absence of Unlawful Influence.* The Company has not offered or sold, or caused the Underwriters to offer or sell, any Offered Securities to any person pursuant to the Directed Share Program with the specific intent to unlawfully influence (i) a customer or supplier of the Company to alter the customer's or supplier's level or type of business with the Company or (ii) a trade journalist or publication to write or publish favorable information about the Company or its products.

(b) Each Selling Stockholder severally represents and warrants to, and agrees with, the several Underwriters that:

(i) *Title to Securities.* Such Selling Stockholder will have on each Closing Date hereinafter mentioned valid and unencumbered title to the Optional Securities to be delivered by such Selling Stockholder on such Closing Date and full right, power and authority to enter into this Agreement and to sell, assign, transfer and deliver the Optional Securities to be delivered by such Selling Stockholder on such Closing Date hereunder; and upon the delivery of and payment for the Optional Securities on each Closing Date hereunder the several Underwriters will acquire valid and unencumbered title to the Optional Securities to be delivered by such Selling Stockholder on such Closing Date.

(ii) *Good Standing of Selling Stockholders*. To the extent any Selling Stockholder is an entity, such Selling Stockholder is validly existing and in good standing under the laws of the jurisdiction of its organization.

(iii) *Power and Authority*. Such Selling Stockholder has full right, power and authority, corporate or otherwise, to enter into this Agreement.

(iv) *No Distribution of Offering Material*. No Selling Stockholder has distributed or will distribute any prospectus or other offering material in connection with the offering and sale of the Offered Securities.

(v) *Absence of Further Requirements*. No consent, approval, authorization or order of, or filing with, any person (including any governmental agency or body or any court) is required to be obtained or made by any Selling Stockholder for the consummation of the transactions contemplated by this Agreement in connection with the offering and sale of the Optional Securities sold by such Selling Stockholder, except such as have been obtained and made under the Act and such as may be required under state securities laws.

(vi) *Absence of Defaults and Conflicts Resulting from Transaction*. The execution, delivery and performance of this Agreement and the consummation of the transactions herein contemplated will not result in a breach or violation of any of the terms and provisions of, or constitute a default under, or result in the imposition of any lien, charge or encumbrance upon any property or assets

of any Selling Stockholder pursuant to, any statute, any rule, regulation or order of any governmental agency or body or any court having jurisdiction over such Selling Stockholder or its properties or any agreement or instrument to which such Selling Stockholder is a party or by which such Selling Stockholder is bound or to which any of the properties of such Selling Stockholder is subject, or the charter or by-laws of or similar organizational documents of such Selling Stockholder or the constituent documents of any Selling Stockholder that is not a natural person or an entity except for any such breach, lien, charge, encumbrance, violation or default that would not, individually or in the aggregate, reasonably be expected to impair the consummation of such Selling Stockholder's obligations hereunder.

(vii) *Final Prospectus*. On its date, at the time of filing of the Final Prospectus pursuant to Rule 424(b) or (if no such filing is required) at the Effective Time of the Additional Registration Statement in which the Final Prospectus is included, and on each Closing Date, the Final Prospectus will not include any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading. The preceding sentence applies only to written information furnished to the Company by the such Selling Stockholder specifically for use in the Final Prospectus, it being understood and agreed that the only such information is that described as such in Section 8(b) hereof.

(viii) *General Disclosure Package*. As of the Applicable Time, (i) the General Disclosure Package, (ii) any individual Limited Use Issuer Free Writing Prospectus, when considered together with the General Disclosure Package or (iii) any individual Testing-the-Waters Communication, when considered together with the General Disclosure Package, did not include any untrue statement of a material fact or omitted to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The preceding sentence applies only to written information furnished to the Company by such Selling Stockholder specifically for use in the General Disclosure Package, any individual Limited Use Issuer Free Writing Prospectus or any Testing-the-Waters Communication, it being understood and agreed that the only such information is that described as such in Section 8(b) hereof.

(ix) *Authorization of Agreement.* This Agreement has been duly authorized, executed and delivered by each Selling Stockholder.

(x) *No Finder's Fee.* Except as disclosed in the General Disclosure Package and the Final Prospectus, there are no contracts, agreements or understandings between such Selling Stockholder and any person that would give rise to a valid claim against the such Selling Stockholder or any Underwriter for a brokerage commission, finder's fee or other like payment in connection with this offering.

(xi) *Absence of Manipulation*. Such Selling Stockholder has not taken, directly or indirectly, any action that is designed to or that has constituted or that would reasonably be expected to cause or result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Optional Securities.

(xii) *No Undisclosed Material Information.* The sale of the Optional Securities by such Selling Stockholder pursuant to this Agreement is not prompted by any material information concerning the Company or any of its subsidiaries that is not set forth the General Disclosure Package and the Final Prospectus.

(xiii) *Testing-the-Waters Communication*. Such Selling Stockholder has not engaged in any Testing-the-Waters Communication.

3. *Purchase, Sale and Delivery of Offered Securities*. On the basis of the representations, warranties and agreements and subject to the terms and conditions set forth herein, the Company agrees to sell to each Underwriter, and each Underwriter agrees, severally and not jointly, to purchase from the Company, at a purchase price of $[ ] per share, the respective numbers of shares of Firm Securities set forth opposite the name of such Underwriter in Schedule A hereto.

The Company will deliver the Firm Securities to or as instructed by the Representatives for the accounts of the several Underwriters in a form reasonably acceptable to the Representatives against payment of the purchase price for such Firm Securities by the Underwriters in Federal (same day) funds by wire transfer to an account at a bank acceptable to the Representatives drawn to the order of the Company at the office of Baker Botts L.L.P, 910 Louisiana Street, Houston, Texas 77002, at 9:00 A.M., New York time, on [ ], 2017 or at such other time not later than seven full business days thereafter as the Representatives and the Company determine, such time being herein referred to as the "**First Closing Date**". For purposes of Rule 15c6-1 under the Exchange Act, the First Closing Date (if later than the otherwise applicable settlement date) shall be the settlement date for payment of funds and delivery of securities for all the Offered Securities sold pursuant to the offering contemplated by this Agreement. Delivery of the Firm Securities will be made through the facilities of the Depositary Trust Company (the "**DTC**") unless the Representatives shall otherwise instruct and evidence of their issuance will be made available to the Representatives.

In addition, upon written notice from the Representatives given to the Selling Stockholders from time to time not more than 30 days subsequent to the date of the Final Prospectus, the Underwriters may purchase all or less than all of the Optional Securities at the purchase price per Security to be paid for the Firm Securities. The Selling Stockholders agree, severally and not jointly, to sell to the Underwriters the respective numbers of Optional Securities obtained by multiplying the number of Optional Securities specified in such notice by a fraction the numerator of which is [ ], the number of shares set forth opposite the names of such Selling Stockholders in Schedule B hereto under the caption "Number of Optional Securities to be Sold" and the denominator of which is the total number of Optional Securities (subject to adjustment by the Representatives in its

discretion to eliminate fractions). Such Optional Securities shall be purchased from each Selling Stockholder for the account of each Underwriter in the same proportion as the number of Firm Securities set forth opposite such Underwriter's name bears to the total number of Firm Securities (subject to adjustment by the Representatives in its discretion to eliminate fractions) and may be purchased by the Underwriters only for the purposes of covering over-allotments made in connection with the sale of the Firm Securities. No Optional Securities shall be sold or delivered unless the Firm Securities previously have been, or simultaneously are, sold and delivered. The right to purchase the Optional Securities or any portion thereof may be exercised from time to time and to the extent not previously exercised may be surrendered and terminated at any time upon notice by the Representatives to the Selling Stockholders.

Each time for the delivery of and payment for the Optional Securities, being herein referred to as an "**Optional Closing Date**", which may be the First Closing Date (the First Closing Date and each Optional Closing Date, if any, being sometimes referred to as a "**Closing Date**"), shall be determined by the Representatives but shall be not later than five full business days after written notice of election to purchase Optional Securities is given. Each Selling Stockholder will deliver the Optional Securities being purchased from it on each Optional Closing Date to or as instructed by the Representatives for the accounts of the several Underwriters in a form reasonably acceptable to the Representatives, against payment of the purchase price therefore in Federal (same day) funds by wire transfer to an account at a bank specified by such Selling Stockholder (and acceptable to the Representatives), at the above office of Baker Botts L.L.P. Delivery of the Optional Securities will be made through the facilities of the DTC unless the Representatives shall otherwise instruct and evidence of their issuance will be made available to the Representatives.

4. *Offering by Underwriters*. It is understood that the several Underwriters propose to offer the Offered Securities for sale to the public as set forth in the Final Prospectus.

5. *Certain Agreements of the Company and the Selling Stockholders*. The Company agrees with the several Underwriters and the Selling Stockholders that:

(a) *Additional Filings*. Unless filed pursuant to Rule 462(c) as part of the Additional Registration Statement in accordance with the next sentence, the Company will file the Final Prospectus, in a form approved by the Representatives, with the Commission pursuant to and in accordance with subparagraph (1) (or, if applicable and if consented to by the Representatives, subparagraph (4)) of Rule 424(b) not later than the earlier of (A) the second business day following the execution and delivery of this Agreement or (B) the fifteenth business day after the Effective Time of the Initial Registration Statement. The Company will advise the Representatives promptly of any such filing pursuant to Rule 424(b) and provide satisfactory evidence to the Representatives of such timely filing. If an Additional Registration Statement is necessary to register a portion of the Offered Securities under the Act but the Effective Time thereof has not occurred as of the execution and delivery of this Agreement, the Company will file the additional registration statement or, if filed, will file a post-effective amendment thereto with the Commission pursuant to and in accordance with Rule 462(b) on or prior to 10:00 P.M.,

New York time, on the date of this Agreement or, if earlier, on or prior to the time the Final Prospectus is finalized and distributed to any Underwriter, or will make such filing at such later date as shall have been consented to by the Representatives.

(b) *Filing of Amendments: Response to Commission Requests.* The Company will promptly advise the Representatives of any proposal to amend or supplement at any time the Initial Registration Statement, any Additional Registration Statement or any Statutory Prospectus and will not effect such amendment or supplementation to which the Representatives' reasonably object; and the Company will also advise the Representatives promptly of (i) the effectiveness of any Additional Registration Statement (if its Effective Time is subsequent to the execution and delivery of this Agreement), (ii) any amendment or supplementation of a Registration Statement or any Statutory Prospectus, (iii) any request by the Commission or its staff for any amendment to any Registration Statement, for any supplement to any Statutory Prospectus or for any additional information, (iv) the institution by the Commission of any stop order proceedings in respect of a Registration Statement or the threatening of any proceeding for that purpose, and (v) the receipt by the Company of any notification with respect to the suspension of the qualification of the Offered Securities in any jurisdiction or the institution or threatening of any proceedings for such purpose. The Company will use its best efforts to prevent the issuance of any such stop order or the suspension of any such qualification and, if issued, to obtain as soon as possible the withdrawal thereof.

(c) *Continued Compliance with Securities Laws.* If, at any time when a prospectus relating to the Offered Securities is (or but for the exemption in Rule 172 would be) required to be delivered under the Act by any Underwriter or dealer, any event occurs as a result of which the Final Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, or if it is necessary at any time to amend the Registration Statement or supplement the Final Prospectus to comply with the Act, the Company will promptly notify the Representatives of such event and will promptly prepare and file with the Commission and furnish, at its own expense, to the Underwriters and the dealers and any other dealers upon request of the Representatives, an amendment or supplement which will correct such statement or omission or an amendment which will effect such compliance. Neither the Representatives' consent to, nor the Underwriters' delivery of, any such amendment or supplement shall constitute a waiver of any of the conditions set forth in Section 7 hereof.

(d) *Testing-the-Waters Communication.* If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such statement or omission.

(e) *Rule 158.* As soon as practicable, but not later than the Availability Date (as defined below), the Company will make generally available to its security holders an earnings statement covering a period of at least 12 months beginning after the Effective Time of the Initial Registration Statement (or, if later, the Effective Time of the Additional Registration Statement) which will satisfy the provisions of Section 11(a) of the Act and Rule 158 under the Act. For the purpose of the preceding sentence, "**Availability Date**" means the day after the end of the fourth fiscal quarter following the fiscal quarter that includes such Effective Time on which the Company is required to file its Form 10-Q for such fiscal quarter except that, if such fourth fiscal quarter is the last quarter of the Company's fiscal year, "Availability Date" means the day after the end of such fourth fiscal quarter on which the Company is required to file its Form 10-K.

(f) *Furnishing of Prospectuses.* Upon the request from any Representative, the Company will furnish to the Representatives copies of each Registration Statement (including all exhibits), and upon request of the Representatives, signed copies of each Registration Statement, each related Statutory Prospectus, and, so long as a prospectus relating to the Offered Securities is (or but for the exemption in Rule 172 would be) required to be delivered under the Act, the Final Prospectus and all amendments and supplements to such documents, in each case in such quantities as the Representatives may reasonably request. The Final Prospectus shall be so furnished within the time periods specified by Rule 424(b) and Rule 430A under the Securities Act. All other such documents shall be so furnished as soon as available. The Company will pay the expenses of printing and distributing to the Underwriters all such documents.

(g) *Blue Sky Qualifications.* The Company will arrange for the qualification of the Offered Securities for sale under the laws of such jurisdictions as the Representatives reasonably designate and will continue such qualifications in effect so long as required for the distribution of the Offered Securities by the Underwriters; provided that the Company will not be required to qualify as a foreign corporation or to file a general consent to service of process in any such jurisdiction or to subject itself to a taxing authority where it is not now so subject.

(h) *Reporting Requirements.* During the period of two years hereafter, the Company will furnish to the Representatives and, upon request, to each of the other Underwriters, as soon as practicable after the end of each fiscal year, a copy of its annual report to stockholders for such year; and the Company will furnish to the Representatives (i) as soon as available, a copy of each report and any definitive proxy statement of the Company filed with the Commission under the Exchange Act or mailed to stockholders, and (ii) from time to time, such other information concerning the Company as the Representatives may reasonably request. However, so long as the Company is subject to the reporting requirements of either Section 13 or Section 15(d) of the Exchange Act and is timely filing reports with the Commission on its Electronic Data Gathering, Analysis and Retrieval system (or any successor system), it is not required to furnish such reports or statements to the Underwriters.

(i) *Payment of Expenses.*

(i) The Company agrees with the several Underwriters that the Company will pay all expenses incident to the performance of the obligations of the Company and the Selling Stockholders under this Agreement, including but not limited to (i) any filing fees and other expenses (including reasonable and documented fees and disbursements of counsel to the Underwriters) incurred in connection with qualification or registering (or obtaining exemptions from the qualification or registering of) all or any part of the Offered Securities for offer and sale under the laws of such jurisdictions as the Representatives designate and the preparation and printing of memoranda relating thereto, (ii) costs and expenses related to the review by the FINRA of the Offered Securities (including filing fees and the reasonable and documented fees and expenses of counsel for the Underwriters relating to such review); provided that the amount payable by the Company with respect to fees and disbursements of counsel pursuant to subsections (i) and (ii) shall not exceed $40,000, (iii) costs and expenses of the Company relating to investor presentations or any "road show" in connection with the offering and sale of the Offered Securities including, without limitation, any travel expenses of the Company's officers and employees and any other expenses of the Company including 50% of the cost of the chartering of airplanes in connection with the road show (the remaining 50% of the cost of such aircraft to be paid by the Underwriters), (iv) fees and expenses incident to listing the Offered Securities on NASDAQ Stock Market and other national and foreign exchanges, (v) fees and expenses in connection with the registration of the Offered Securities under the Exchange Act, (vi) any transfer taxes payable in connection with the delivery of the Offered Securities to the Underwriters, (vii) expenses incurred in distributing preliminary prospectuses and the Final Prospectus (including any amendments and supplements thereto) to the Underwriters and expenses incurred in preparing, printing and distributing any Issuer Free Writing Prospectuses to investors or prospective investors and (viii) all other fees, costs and expenses referred to in Item 13 of Part II of the Registration Statement.

(ii) Each Selling Stockholder, severally and not jointly, further agrees with the several Underwriters to pay (directly or by reimbursement) all fees and expenses incident to the performance of their obligations under this Agreement that are not otherwise specifically provided for herein, including but not limited to (i) fees and expenses of counsel and other advisors for such Selling Stockholders and (ii) expenses and taxes incident to the sale and delivery of the Offered Securities to be sold by such Selling Stockholders to the Underwriters hereunder. It being understood, however, that the Company shall bear, and the Selling Stockholders shall not be required to pay or to reimburse the Company for, the cost incurred by the Company of any other matters not directly relating to the sale and purchase of the Optional Securities sold by the applicable Selling Stockholders pursuant to this Agreement.

(j) *Use of Proceeds.* The Company will use the net proceeds received by it in connection with this offering in the manner described in the "Use of Proceeds" section of the General Disclosure Package and, except as disclosed in the General Disclosure Package and the Final Prospectus, the Company does not intend to use any of the proceeds from the sale of the Offered Securities hereunder to repay any outstanding debt owed to any Underwriter or affiliate of any Underwriter.

(k) *Absence of Manipulation.* The Company and the Selling Stockholders will not take, directly or indirectly, any action designed to or that would constitute or that might reasonably be expected to cause or result in, stabilization or manipulation of the price of any securities of the Company to facilitate the sale or resale of the Offered Securities.

(l) *Restriction on Sale of Securities by the Company.* For the period specified below (the "**Lock-Up Period**"), the Company will not, directly or indirectly, take any of the following actions with respect to its Securities or any securities convertible into or exchangeable or exercisable for any of its Securities ("**Lock-Up Securities**"): (i) offer, sell, issue, contract to sell, pledge or otherwise dispose of Lock-Up Securities, (ii) offer, sell, issue, contract to sell, contract to purchase or grant any option, right or warrant to purchase Lock-Up Securities, (iii) enter into any swap, hedge or any other agreement that transfers, in whole or in part, the economic consequences of ownership of Lock-Up Securities, (iv) establish or increase a put equivalent position or liquidate or decrease a call equivalent position in Lock-Up Securities within the meaning of Section 16 of the Exchange Act or (v) file with the Commission a registration statement under the Act relating to Lock-Up Securities, other than a registration statement on Form S-8, or publicly disclose the intention to take any such action, without the prior written consent of the Representatives, except (A) issuances of Lock-Up Securities pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of warrants, options, restricted stock or restricted stock units, in each case outstanding on the date hereof and described in the General Disclosure Package, (B) grants of securities (including without limitation, options, restricted stock or restricted stock units) convertible into, or exercisable for, Securities pursuant to the terms of a plan or other equity compensation arrangement described in the General Disclosure Package or the issuance of Lock-Up Securities pursuant to the exercise of such options, or (C) the issuance of up to 5% of the total number of Securities then outstanding in connection with the acquisition of the assets of, or a majority or controlling portion of the equity of another entity, or a joint venture with another entity, provided that each recipient of any Lock-Up Securities issued or sold pursuant to clause (C) above executes and delivers to the Representatives prior to such issuance or sale (as the case may be) an agreement having substantially the same terms as the lock-up agreements described in Section 7(i) hereof. The Lock-Up Period will commence on the date hereof and continue for 180 days after the date hereof or such earlier date that the Representatives consent to in writing.

(m) *Agreement to Announce Lock-Up Waiver.* If the Representatives, in their sole discretion, agree to release or waive the restrictions set forth in a lock-up letter described in Section 7(i) hereof for an officer or director of the Company and provide the Company with notice of the impending release or waiver at least three business days before the effective date of such release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit F hereto through a major news service at least two business days before the effective date of the release or waiver.

(n) *Emerging Growth Company Status.* The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Offered Securities within the meaning of the Act and (ii) completion of the Lock-Up Period.

(o) *Transfer Restrictions.* In connection with the Directed Share Program, the Company will ensure that the Directed Shares will be restricted to the extent required by FINRA or the FINRA rules from sale, transfer, assignment, pledge or hypothecation for a period of three months following the date of the effectiveness of the Registration Statement. The Designated Underwriter will notify the Company as to which Participants will need to be so restricted. The Company will direct the transfer agent to place stop transfer restrictions upon such securities for such period of time.

(p) *Payment of Expenses Related to Directed Share Program.* The Company will pay all fees and disbursements of counsel (including non-U.S. counsel) incurred by the Underwriters in connection with the Directed Share Program and stamp duties, similar taxes or duties or other taxes, if any, incurred by the underwriters in connection with the Directed Share Program.

(q) *Compliance with Foreign Laws.* The Company will comply with all applicable securities and other applicable laws, rules and regulations in each foreign jurisdiction in which the Directed Shares are offered in connection with the Directed Share Program.

6. *Free Writing Prospectuses*(a) . The Company and Selling Stockholders represent and agree that, unless they obtain the prior consent of the Representatives, and each Underwriter represents and agrees that, unless it obtains the prior consent of the Company and the Representatives, it has not made and will not make any offer relating to the Offered Securities that would constitute an Issuer Free Writing Prospectus, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405, required to be filed with the Commission. Any such free writing prospectus consented to by the Company and the Representatives is hereinafter referred to as a "**Permitted Free Writing Prospectus**." The Company represents that it has treated and agrees that it will treat each Permitted Free Writing Prospectus as an "issuer free writing prospectus," as defined in Rule 433, and has complied and will comply with the requirements of Rules 164 and 433 applicable to any Permitted Free Writing Prospectus, including timely Commission filing where required, legending and record keeping. The Company represents that it has satisfied and agrees that it will satisfy the conditions in Rule 433 to avoid a requirement to file with the Commission any electronic road show.

7. *Conditions of the Obligations of the Underwriters*. The obligations of the several Underwriters to purchase and pay for the Firm Securities on the First Closing Date and the Optional Securities to be purchased on each Optional Closing Date will be subject to the accuracy of the representations and warranties of the Company and the Selling Stockholders herein (as though made on such Closing Date), to the accuracy of the statements of officer of the Company and the Selling Stockholders made pursuant to the provisions hereof, to the performance by the Company and the Selling Stockholders of their obligations hereunder and to the following additional conditions precedent:

(a) *Accountants' Comfort Letter.* The Representatives shall have received letters, dated, respectively, the date hereof and each Closing Date, of PricewaterhouseCoopers LLP confirming that they are a registered public accounting firm and independent public accountants within the meaning of the Securities Laws and in the form and substance satisfactory to the Representatives (except that, in any letter dated a Closing Date, the specified date referred to in the comfort letters shall be a date no more than three days prior to such date).

(b) *Effectiveness of Registration Statement.* If the Effective Time of the Additional Registration Statement (if any) is not prior to the execution and delivery of this Agreement, such Effective Time shall have occurred not later than 10:00 P.M., New York time, on the date of this Agreement or, if earlier, the time the Final Prospectus is finalized and distributed to any Underwriter, or shall have occurred at such later time as shall have been consented to by the Representatives. The Final Prospectus shall have been filed with the Commission in accordance with the Rules and Regulations and Section 5(a) hereof. Prior to such Closing Date, no stop order suspending the effectiveness of a Registration Statement shall have been issued and no proceedings for that purpose shall have been instituted or, to the knowledge of the Company or the Representatives, shall be contemplated by the Commission.

(c) *No Material Adverse Change.* Subsequent to the execution and delivery of this Agreement, there shall not have occurred (i) any change, or any development or event involving a prospective change, in the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries taken as a whole which, in the judgment of the Representatives, is material and adverse and makes it impractical or inadvisable to market the Offered Securities; (ii) any downgrading in the rating of any debt securities or preferred stock of the Company by any "nationally recognized statistical rating organization" (as defined in Section 3(a)(62) of the Exchange Act), or any public announcement that any such organization has under surveillance or review its rating of any debt securities or preferred stock of the Company (other than an announcement with positive implications of a possible upgrading, and no implication of a possible downgrading, of such rating) or any announcement that the Company has been placed on negative outlook; (iii) any change in U.S. or international financial, political or economic conditions or currency exchange rates or exchange controls the effect of which is such as to make it, in the judgment of the Representatives, impractical to market or to enforce contracts for the sale of the Offered Securities, whether in the primary market or in respect of dealings in the secondary market; (iv) any suspension or material limitation of trading in securities generally on the New York Stock Exchange or the NASDAQ Stock Market, or any setting of minimum or maximum prices for trading on such exchange; (v) or any suspension of trading of any securities of the Company on any exchange or in the over-the-counter market; (vi) any banking moratorium declared by any U.S. federal or New York authorities; (vii) any major disruption of settlements of securities, payment or clearance services in the United States or any other country where such securities are listed or (viii) any attack on, outbreak or escalation of hostilities or act

of terrorism involving the United States, any declaration of war by Congress or any other national or international calamity or emergency if, in the judgment of the Representatives, the effect of any such attack, outbreak, escalation, act, declaration, calamity or emergency is such as to make it impractical or inadvisable to market the Offered Securities or to enforce contracts for the sale of the Offered Securities.

(d) *Opinion of Counsel for the Company.* The Representatives shall have received an opinion and negative assurance letter, dated such Closing Date, of Weil, Gotshal & Manges LLP, counsel for the Company, in the forms attached hereto as Exhibit A and Exhibit B. The Representatives shall have received an opinion, dated such Closing Date, of Burnet, Duckworth & Palmer, LLP, Canadian counsel for the Company, in the form attached hereto as Exhibit C.

(e) *Opinion of Counsel for Selling Stockholders.* The Representatives shall have received an opinion, dated such Closing Date, of Weil, Gotshal & Manges LLP, counsel for Advent-NCS Acquisition L.P. (the "**Advent Selling Stockholder**"), in the form attached hereto as Exhibit D. The Representatives shall have received an opinion, dated such Closing Date, of Dentons Canada LLP, counsel for Cemblend Systems, Inc. (the "**Cemblend Selling Stockholder**"), in the form attached hereto as Exhibit E.

(f) *Opinion of Counsel for Underwriters.* The Representatives shall have received from Baker Botts L.L.P., counsel for the Underwriters, such opinion or opinions, dated such Closing Date, with respect to such matters as the Representatives may require, and the Selling Stockholders and the Company shall have furnished to such counsel such documents as they request for the purpose of enabling them to pass upon such matters.

(g) *Company Officers' Certificate.* The Representatives shall have received a certificate, dated such Closing Date, of an executive officer of the Company and a principal financial or accounting officer of the Company in which such officers shall state that:

(i) The representations and warranties of the Company in this Agreement are true and correct and the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to such Closing Date;

(ii) No stop order suspending the effectiveness of any Registration Statement has been issued and no proceedings for that purpose have been instituted or, to the best of their knowledge and after reasonable investigation, are contemplated by the Commission;

(iii) The Additional Registration Statement (if any) satisfying the requirements of subparagraphs (1) and (3) of Rule 462(b) was timely filed pursuant to Rule 462(b), including payment of the applicable filing fee in accordance with Rule 111(a) or (b) of Regulation S-T of the Commission; and

(iv) Subsequent to the date of the most recent financial statements in the General Disclosure Package and the Final Prospectus, there has been no material

adverse change, in the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries taken as a whole except as set forth in the General Disclosure Package and the Final Prospectus or as described in such certificate.

(h) *Selling Stockholder Officer's Certificate.* The Representatives shall have received a certificate, dated such Closing Date, of an authorized officer of each Selling Stockholder in which such officers shall state that:

(i) the representations and warranties of such Selling Stockholder set forth in are true and correct on and as of such Closing Date; and

(ii) such Selling Stockholder has complied with all its agreements contained herein and has satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such Closing Date.

(i) *Lock-Up Agreements.* On or prior to the date hereof, the Representatives shall have received lock-up agreements in the form set forth on Exhibit G hereto from each executive officer and director of the Company and each Selling Stockholder. On or prior to the date hereof, the Representatives shall have received lock-up agreements in the form set forth on Exhibit H hereto from each Participant who (x) purchases at least $50,000 worth of Offered Securities and (y) is not obligated to deliver a lock-up agreement pursuant to the immediately preceding sentence of this Section 7(i).

(j) *CFO Certificate.* The Company shall have delivered to the Representatives a certificate, executed by the Chief Financial Officer of the Company, dated as of the date hereof and each Closing Date, addressed to the Representatives on behalf of the several Underwriters and in form and substance satisfactory to the Representatives.

The Company and Selling Stockholders will furnish the Representatives with any additional opinions, certificates, letters and documents as the Representatives reasonably request and conformed copies of documents delivered pursuant to this Section 7. The Representatives may in their sole discretion waive on behalf of the Underwriters compliance with any conditions to the obligations of the Underwriters hereunder, whether in respect of an Optional Closing Date or otherwise.

8. *Indemnification and Contribution.*

(a) *Indemnification of Underwriters by Company.* The Company will indemnify and hold harmless each Underwriter, its partners, members, directors, officers, employees, agents, affiliates and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act (each, an "**Indemnified Party**"), against any and all losses, claims, damages or liabilities, joint or several, to which such Indemnified Party may become subject, under the Act, the Exchange Act, other Federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any part of any Registration Statement at any time, any Statutory Prospectus

as of any time, the Final Prospectus, any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication or arise out of or are based upon the omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of the Statutory Prospectus, the Final Prospectus and any Issuer Free Writing Prospectus, in light of the circumstances under which they were made), not misleading, and will reimburse each Indemnified Party for any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending against any loss, claim, damage, liability, action, litigation, investigation or proceeding whatsoever (whether or not such Indemnified Party is a party thereto), whether threatened or commenced, and in connection with the enforcement of this provision with respect to any of the above as such expenses are incurred; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement in or omission or alleged omission from any of such documents in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representatives specifically for use therein, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in subsection (c) below.

The Company also agrees to indemnify and hold harmless the Designated Underwriter and its affiliates and each person, if any, who controls the Designated Underwriter within the meaning of either Section 15 of the Act or Section 20 of the Exchange Act (the "**Designated Entities"**), from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) (i) arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in any written materials prepared specifically by or with the consent of the Company for distribution to Participants in connection with the Directed Share Program or arising out of or based upon any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading; (ii) arising out of or based upon the failure of any Participant to pay for and accept delivery of Directed Shares that the Participant agreed to purchase; or (iii) arising out of, related to, or in connection with the Directed Share Program, other than losses, claims, damages or liabilities (or expenses relating thereto) that are finally judicially determined to have resulted from the willful misconduct or gross negligence of the Designated Entities.

(b) *Indemnification of Underwriters by Selling Stockholders.* The Selling Stockholders, severally and not jointly, will indemnify and hold harmless each Indemnified Party against any and all losses, claims, damages or liabilities, joint or several, to which such Indemnified Party may become subject, under the Act, the Exchange Act, other Federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any part of any Registration Statement at any time, any Statutory Prospectus as of any time, the Final Prospectus, any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication or arise out of or are based upon the omission or

alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each Indemnified Party for any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending against any loss, claim, damage, liability, action, litigation, investigation or proceeding whatsoever (whether or not such Indemnified Party is a party thereto), whether threatened or commenced, and in connection with the enforcement of this provision with respect to the above as such expenses are incurred; provided, however, that the Selling Stockholders will only be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement in or omission or alleged omission from any of such documents in reliance upon and in conformity with written information furnished to the Company by any such Selling Stockholder specifically for use therein, it being understood and agreed that the only such information furnished by any Selling Stockholder consists of the following information: such Selling Stockholder's name and corresponding share amounts set forth in the table of Principal and Selling Stockholders in the Registration Statement and Final Prospectus under the heading "Principal and Selling Stockholders" and such Selling Stockholder's address. The liability of any Selling Stockholder pursuant to this subsection (b) shall not exceed the total net proceeds (before deducting expenses) received by such Selling Stockholder from the sale of the Securities sold by such Selling Stockholder hereunder.

(c) *Indemnification of Company and Selling Stockholders.* Each Underwriter will severally and not jointly indemnify and hold harmless the Company, each of its directors and each of its officers who signs a Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, and each Selling Stockholder (each, an "**Underwriter Indemnified Party**") against any losses, claims, damages or liabilities to which such Underwriter Indemnified Party may become subject, under the Act, the Exchange Act, or other Federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any part of any Registration Statement at any time, any Statutory Prospectus as of any time, the Final Prospectus, any Written Testing-the-Waters Communication or any Issuer Free Writing Prospectus or arise out of or are based upon the omission or the alleged omission of a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to the Company by such Underwriter through the Representatives specifically for use therein, and will reimburse any legal or other expenses reasonably incurred by such Underwriter Indemnified Party in connection with investigating or defending against any such loss, claim, damage, liability, action, litigation, investigation or proceeding whatsoever (whether or not such Underwriter Indemnified Party is a party thereto), whether threatened or commenced, based upon any such untrue statement or omission, or any such alleged untrue statement or omission as such expenses are incurred, it being understood and agreed that the only such information furnished by any Underwriter consists of the following information in the Final Prospectus furnished on behalf of each Underwriter: the concession figure appearing in

the fourth paragraph under the caption "Underwriting (Conflicts of Interest)" and the information with respect to stabilization transactions appearing in the seventeenth paragraph under the caption "Underwriting (Conflicts of Interest)".

(d) *Indemnification of the Selling Stockholders by the Company.* The Company will indemnify and hold harmless each Selling Stockholder, its partners, members, directors, officers, employees, agents, affiliates and each person, if any, who controls such Selling Stockholder within the meaning of Section 15 of the Act or Section 20 of the Exchange Act (each, a "**Selling Stockholder Indemnified Party**"), against any and all losses, claims, damages or liabilities, joint or several, to which such Selling Stockholder Indemnified Party may become subject, under the Act, the Exchange Act, other Federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any part of any Registration Statement at any time, any Statutory Prospectus as of any time, the Final Prospectus, any Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication or arise out of or are based upon the omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of the Statutory Prospectus, the Final Prospectus and any Issuer Free Writing Prospectus, in light of the circumstances under which they were made), not misleading, and will reimburse each Selling Stockholder Indemnified Party for any legal or other expenses reasonably incurred by such Selling Stockholder Indemnified Party in connection with investigating or defending against any loss, claim, damage, liability, action, litigation, investigation or proceeding whatsoever (whether or not such Indemnified Party is a party thereto), whether threatened or commenced, and in connection with the enforcement of this provision with respect to any of the above as such expenses are incurred; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement in or omission or alleged omission from any of such documents in reliance upon and in conformity with written information furnished to the Company by any such Selling Stockholder specifically for use therein, it being understood and agreed that the only such information furnished by any Selling Stockholder consists of the information described as such in subsection (c) above (it being understood, for the avoidance of doubt, that this Section 8(d) (i) shall in no event affect any liability the Company may have to any Underwriter, or any partner, member, director, officer, employee, agent, affiliate of any Underwriter, or any person, if any, who controls any Underwriter within the meaning of Section 15 of the Act or Section 20 of the Exchange Act and (ii) is an agreement solely between the Company and each Selling Stockholder and the other parties described in this Section 8(d) and the Underwriters shall have no responsibility in connection with any dispute between the Company, any Selling Stockholder and any other party described in this Section 8(d) with respect to an agreement solely between the Company and any Selling Stockholder and the other parties described in this Section 8(d)).

(e) *Actions against Parties; Notification.* Promptly after receipt by an indemnified party under this Section or Section 10 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying

party under subsection (a), (b), (c) or (d) above or Section 10, notify the indemnifying party of the commencement thereof; but the failure to notify the indemnifying party shall not relieve it from any liability that it may have under subsection (a), (b),(c) or (d) above or Section 10 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided further that the failure to notify the indemnifying party shall not relieve it from any liability that it may have to an indemnified party otherwise than under subsection (a), (b), (c) or (d) above or Section 10. In case any such action is brought against any indemnified party and it notifies an indemnifying party of the commencement thereof, the indemnifying party will be entitled to participate therein and, to the extent that it may wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party will not be liable to such indemnified party under this Section or Section 10, as the case may be, for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof other than reasonable costs of investigation. Notwithstanding anything contained herein to the contrary, if indemnity may be sought pursuant to the last paragraph in Section 8(a) hereof in respect of such action or proceeding, then in addition to such separate firm for the indemnified parties, the indemnifying party shall be liable for the reasonable fees and expenses of not more than one separate firm (in addition to any local counsel) for the Designated Underwriter for the defense of any losses, claims, damages and liabilities arising out of the Directed Share Program, and all persons, if any, who control the Designated Underwriter within the meaning of either Section 15 of the Act of Section 20 of the Exchange Act. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened action in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party unless such settlement (i) includes an unconditional release of such indemnified party from all liability on any claims that are the subject matter of such action and (ii) does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of an indemnified party.

(f) *Contribution.* If the indemnification provided for in this Section is unavailable or insufficient to hold harmless an indemnified party under subsection (a), (b) or (c) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a), (b) or (c) above (i) in such proportion as is appropriate to reflect the relative benefits received by the Company and the Selling Stockholders on the one hand and the Underwriters on the other from the offering of the Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company and the Selling Stockholders on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities as well as any other relevant equitable considerations. The relative benefits received by the Company and the Selling Stockholders on the one hand and the Underwriters on the other shall be deemed to be in

the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company and the Selling Stockholders bear to the total underwriting discounts and commissions received by the Underwriters. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company, the Selling Stockholders or the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (f) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any action or claim which is the subject of this subsection (f). Notwithstanding the provisions of this subsection (f), no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages which such Underwriter has otherwise been required to pay by reason of such untrue statement or omission or alleged untrue statement or omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this Section 8(f) to contribute are several in proportion to their respective underwriting obligations and not joint. The Company, the Selling Stockholders and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 8(f) were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to in this Section 8(f). The liability of any Selling Stockholder pursuant to this subsection (f) shall not exceed the total net proceeds (before deducting expenses) received by such Selling Stockholder from the sale of the Securities sold by such Selling Stockholder hereunder.

9. *Default of Underwriters*. If any Underwriter or Underwriters default in their obligations to purchase Offered Securities hereunder on either the First or any Optional Closing Date and the aggregate number of shares of Offered Securities that such defaulting Underwriter or Underwriters agreed but failed to purchase does not exceed 10% of the total number of shares of Offered Securities that the Underwriters are obligated to purchase on such Closing Date, the Representatives may make arrangements satisfactory to the Company and the Selling Stockholders for the purchase of such Offered Securities by other persons, including any of the Underwriters, but if no such arrangements are made by such Closing Date, the non-defaulting Underwriters shall be obligated severally, in proportion to their respective commitments hereunder, to purchase the Offered Securities that such defaulting Underwriters agreed but failed to purchase on such Closing Date. If any Underwriter or Underwriters so default and the aggregate number of shares of Offered Securities with respect to which such default or defaults occur exceeds 10% of the total number of shares of Offered Securities that the Underwriters are obligated to purchase on such Closing Date and arrangements satisfactory to the Representatives, the Company and the Selling Stockholders for the purchase of such Offered Securities by other persons are not made within 36 hours after

such default, this Agreement will terminate without liability on the part of any non-defaulting Underwriter, the Company or the Selling Stockholders, except as provided in Section 11 (provided that if such default occurs with respect to Optional Securities after the First Closing Date, this Agreement will not terminate as to the Firm Securities or any Optional Securities purchased prior to such termination). As used in this Agreement, the term "Underwriter" includes any person substituted for an Underwriter under this Section. Nothing herein will relieve a defaulting Underwriter from liability for its default.

10. *Qualified Independent Underwriter*. The Company hereby confirms that at its request Credit Suisse Securities (USA) LLC has without compensation acted as "**qualified independent underwriter**" (in such capacity, the "**QIU**") within the meaning of Rule 5121 of FINRA in connection with the offering of the Offered Securities. The Company and the Selling Stockholders will severally and not jointly indemnify and hold harmless the QIU, its directors, officers, employees and agents and each person, if any, who controls the QIU within the meaning of Section 15 of the Act or Section 20 of the Exchange Act against any and all losses, claims, damages or liabilities, joint or several, to which the QIU may become subject, under the Act, the Exchange Act, other federal or state statutory law or regulation or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon the QIU's acting (or alleged failing to act) as such "qualified independent underwriter" and will reimburse the QIU for any legal or other expenses reasonably incurred by the QIU in connection with investigating or defending any such loss, claim, damage, liability or action as such expenses are incurred and provided, further, that each Selling Stockholder shall only be subject to liability under this Section to the extent such liability arises out of or is based upon any untrue statement or alleged untrue statement or upon an omission or alleged omission based upon information provided by such Selling Stockholder or contained in a representation or warranty given by such Selling Stockholder in this Agreement.

11. *Survival of Certain Representations and Obligations*. The respective indemnities, agreements, representations, warranties and other statements of the Selling Stockholders, of the Company or its officers and of the several Underwriters set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation, or statement as to the results thereof, made by or on behalf of any Underwriter, any Selling Stockholder, the Company or any of their respective representatives, officers or directors or any controlling person, and will survive delivery of and payment for the Offered Securities. If the purchase of the Offered Securities by the Underwriters is not consummated for any reason other than solely because of the termination of this Agreement pursuant to Section 9 hereof, the Company will reimburse the Underwriters for all out-of-pocket expenses (including fees and disbursements of counsel) reasonably incurred by them in connection with the offering of the Offered Securities, and the respective obligations of the Company, the Selling Stockholders and the Underwriters pursuant to Section 8 hereof and the obligations of the Company, the Selling Stockholders pursuant to Section 10 shall remain in effect. In addition, if any Offered Securities have been purchased hereunder, the representations and warranties in Section 2 and all obligations under Section 5 shall also remain in effect.

12. *Notices*. All communications hereunder will be in writing and, if sent to the Underwriters, will be mailed, delivered or telegraphed and confirmed to the Representatives, c/o Credit Suisse Securities (USA) LLC, Eleven Madison Avenue, New York, N.Y. 10010-3629, Attention: LCD-IBD, Citigroup Global Markets Inc., 388 Greenwich Street, New York, New York 10013, Attention: General Counsel, facsimile: (646) 291-1469, and Wells Fargo Securities, LLC, 375 Park Avenue, New York, New York 10152, Attention: Equity Syndicate Department (fax no: (212) 214-5918), or, if sent to the Company, will be mailed, delivered or telegraphed and confirmed to it at NCS Multistage Holdings, Inc., 19450 State Highway 249, Suite 200, Houston, TX 77070, Attention: P. Kevin Trautner, or, if sent to the Selling Stockholders, will be mailed, delivered or telegraphed and confirmed as set forth on Schedule B; provided, however, that any notice to an Underwriter pursuant to Section 8 will be mailed, delivered or telegraphed and confirmed to such Underwriter.

13. *Successors*. This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective personal representatives and successors and the officers and directors and controlling persons referred to in Section 8, and no other person will have any right or obligation hereunder.

14. *Representation of Underwriters*. The Representatives will act for the several Underwriters in connection with the transactions contemplated by this Agreement, and any action under this Agreement taken by the Representatives will be binding upon all the Underwriters.

15. *Counterparts*. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement.

16. *Absence of Fiduciary Relationship.* The Company and the Selling Stockholders acknowledge and agree that:

(a) *No Other Relationship.* The Representatives have been retained solely to act as underwriters in connection with the sale of the Offered Securities and that no fiduciary, advisory or agency relationship between the Company or the Selling Stockholders, on the one hand, and the Representatives, on the other, has been created in respect of any of the transactions contemplated by this Agreement or the Final Prospectus, irrespective of whether the Representatives have advised or are advising the Company or the Selling Stockholders on other matters;

(b) *Arms' Length Negotiations.* The price of the Offered Securities set forth in this Agreement was established by Company and the Selling Stockholders following discussions and arms-length negotiations with the Representatives and the Company and the Selling Stockholders are capable of evaluating and understanding and understand and accept the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) *Absence of Obligation to Disclose.* The Company and the Selling Stockholders have been advised that the Representatives and their affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company or the Selling Stockholders and that the Representatives have no obligation to disclose such interests and transactions to the Company or the Selling Stockholders by virtue of any fiduciary, advisory or agency relationship; and

(d) *Waiver.* The Company and the Selling Stockholders waive, to the fullest extent permitted by law, any claims they may have against the Representatives for breach of fiduciary duty or alleged breach of fiduciary duty and agree that the Representatives shall have no liability (whether direct or indirect) to the Company or the Selling Stockholders in respect of such a fiduciary duty claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

17. *Applicable Law*. This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

Each of the Company and the Selling Stockholders hereby submits to the non-exclusive jurisdiction of the Federal and state courts in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. The Company irrevocably and unconditionally waives any objection to the laying of venue of any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby in Federal and state courts in the Borough of Manhattan in the City of New York and irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such suit or proceeding in any such court has been brought in an inconvenient forum.

18. *Waiver of Jury Trial.* The Company and the Selling Stockholders hereby irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

[*Signature pages follow*]

If the foregoing is in accordance with the Representatives' understanding of our agreement, kindly sign and return to the Company one of the counterparts hereof, whereupon it will become a binding agreement among the Selling Stockholders, the Company and the several Underwriters in accordance with its terms.

Very truly yours,

NCS MULTISTAGE HOLDINGS, INC.

By: _____
Name:
Title:

ADVENT-NCS ACQUISITION L.P.

By: [ ], ITS GENERAL PARTNER

By: _____
Name:
Title:

CEMBLEND SYSTEMS, INC.

By: _____
Name:
Title:

[Signature Page to Underwriting Agreement]

The foregoing Underwriting Agreement is hereby confirmed and accepted as of the date first above written.

CREDIT SUISSE SECURITIES (USA) LLC

By: _____
Name:
Title:

CITIGROUP GLOBAL MARKETS INC.

By: _____
Name:
Title:

WELLS FARGO SECURITIES, LLC

By: _____
Name:
Title:

Acting on behalf of themselves and as the Representatives of the several Underwriters.

SCHEDULE A

Underwriter	Number of Firm Securities to be Purchased
Credit Suisse Securities (USA) LLC	
Citigroup Global Markets Inc	
Wells Fargo Securities, LLC	
J.P. Morgan Securities LLC	
Piper Jaffray & Co	
Raymond James & Associates, Inc	
RBC Capital Markets, LLC	
Tudor, Pickering, Holt & Co. Securities, Inc	
Total	

SCHEDULE B

Selling Stockholder	Number of Optional Securities to be Sold
Advent-NCS Acquisition L.P	
Cemblend Systems, Inc	
Total	

The notice address for each Selling Stockholder for purposes of Section 12 of this Agreement is as follows:

[ ]

SCHEDULE C

1. General Use Free Writing Prospectuses (included in the General Disclosure Package)

"General Use Issuer Free Writing Prospectus" includes each of the following documents:

[None.]

2. Other Information Included in the General Disclosure Package

The following information is also included in the General Disclosure Package:

Price per share to the public: $[ ].

SCHEDULE D

Subsidiaries of the Company

Entity	Percentage Ownership	Jurisdiction
Pioneer Intermediate, Inc.(US)	100%	Delaware
Pioneer Investment, Inc. (US)	100%	Delaware
Pioneer NCS Energy Holdco, LLC (US)	100%	Texas
NCS Multistage, LLC (US)	100%	Texas
NCS International, LLC (US)	100%	Texas
NCS International 2, LLC (US)	100%	Texas
NCS Multistage, Inc. (Canada)	100%	Canada
NCS Argentina, SRL (Argentina)	100%	Argentina
Repeat Precision, LLC (US)	50%	[Texas]
RJ Machine S de RL (Mexico)	100%	Mexico

Exhibit A

Form of Opinion of Counsel to the Company

Exhibit B

Form of Negative Assurance Letter of Counsel to the Company

Exhibit C

Form of Opinion of Canadian Counsel of the Company

Exhibit D

Form of Opinion of Counsel to the Advent Selling Stockholder

Exhibit E

Form of Opinion of Counsel to the Cemblend Selling Stockholder

Exhibit F

Form of Press Release

NCS Multistage Holdings, Inc.

[Date]

NCS Multistage Holdings, Inc. (the "Company") announced today that Credit Suisse, Citigroup and Wells Fargo Securities, the lead book-running managers in the Company's recent public sale of shares of common stock, are [waiving] [releasing] a lock-up restriction with respect to shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on , 20 , and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

Exhibit G

Form of Lock-Up Agreement

[ ], 2017

NCS Multistage Holdings, Inc.
19450 State Highway 249, Suite 200
Houston, TX 77070

CREDIT SUISSE SECURITIES (USA) LLC
CITIGROUP GLOBAL MARKETS INC.
WELLS FARGO SECURITIES, LLC

c/o Credit Suisse Securities (USA) LLC
Eleven Madison Avenue
New York, New York 10010

c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York 10013

c/o Wells Fargo Securities, LLC
375 Park Avenue, 4th Floor
New York, New York 10152

Ladies and Gentlemen:

As an inducement to the underwriters to execute the Underwriting Agreement (the "**Underwriting Agreement**"), pursuant to which an offering (the "**Offering**") will be made that is intended to result in the establishment of a public market for the common stock, par value $0.01 per share (the "**Securities**"), of NCS Multistage Holdings, Inc., and any successor (by merger or otherwise) thereto (the "**Company**"), the undersigned hereby agrees that during the period specified in the following paragraph (the "**Lock-Up Period**"), the undersigned will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any Securities or securities convertible into or exchangeable or exercisable for any Securities, enter into a transaction which would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of the Securities, whether any such aforementioned transaction is to be settled by delivery of the Securities or such other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition, or to enter into any such transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of Credit Suisse Securities (USA) LLC, Citigroup Global Markets Inc. and Wells Fargo Securities, LLC (the "**Representatives**"). In addition, the undersigned agrees that, without the prior written consent of the Representatives, it will not, during the Lock-Up Period, make any demand for or exercise any right with respect to, the registration of any Securities or any security convertible into or exercisable or exchangeable for the Securities.

The Lock-Up Period will commence on the date of this Lock-Up Agreement and continue and include the date that is 180 days after the public offering date set forth on the final prospectus used to sell the Securities (the "**Public Offering Date**") pursuant to the Underwriting Agreement, to which you are or expect to become parties.

Any Securities received upon exercise of options or other securities of the Company granted to the undersigned will also be subject to this Lock-Up Agreement. Any Securities acquired by the undersigned, if the undersigned is not an officer or director, in an issuer directed share program will not be subject to this Lock-Up Agreement. If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing restrictions in this Lock-Up Agreement shall be equally applicable to any issuer-directed Securities the undersigned may purchase in the above-referenced offering.

Notwithstanding the foregoing, the undersigned may transfer Securities:

(i) as a bona fide gift or gifts,

(ii) to any beneficiary of the undersigned pursuant to a will, other testamentary document or intestate succession to the legal representatives, heirs, beneficiary or family member of the undersigned,

(iii) to any trust, partnership, limited liability company or other entity for the direct or indirect benefit of the undersigned or a family member of the undersigned,

(iv) to any family member or other dependent,

(v) as a distribution to limited partners, general partners, members or stockholders of the undersigned,

(vi) to the undersigned's affiliates or to any investment fund or other entity controlled or managed by the undersigned,

(vii) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (vi) above,

(viii) by operation of law in connection with a qualified domestic order or a divorce settlement,

(ix) pursuant to an order of a court or regulatory agency or to comply with any regulations related to the undersigned's ownership of Securities; provided that in the case of any transfer or distribution pursuant to this clause, any filing under Section 16(a) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**") reporting a reduction in beneficial ownership of Securities, shall state that such transfer is pursuant to an order of a court or regulatory agency or to comply with any regulations related to the ownership of the Securities unless such a statement would be prohibited by any applicable law, regulation or order of a court or regulatory agency,

(x) to the Company or its affiliates upon death, disability or termination of employment, in each case, of the undersigned,

(xi) to the Company or its affiliates (A) deemed to occur upon the cashless exercise of options or (B) for the primary purpose of paying the exercise price of such options or for paying taxes (including estimated taxes) due as a result of the exercise of such options or as a result of the vesting of Securities under restricted stock units or restricted stock awards, in each case pursuant to employee benefit plans disclosed

in the Registration Statement filed with the Securities and Exchange Commission with respect to the Offering; provided that in the case of any transfer pursuant to this clause (xi)(B), if the undersigned is required to make a filing under the Exchange Act reporting a reduction in beneficial ownership of Securities during the Lock-Up Period, the undersigned shall include a statement in such report to the effect that the purpose of such transfer was to cover tax obligations of the undersigned in connection with such exercise,

(xii) in connection with transactions by any person other than the Company relating to Securities acquired in open market transactions after the completion of the Offering,

(xiii) pursuant to a bona fide third-party tender offer made to all holders of the Securities, merger, consolidation or other similar transaction involving a change of control (as defined below) of the Company, that, in each case, has been approved by the Company's board of directors; provided, that in the event that such tender offer, merger, consolidation or other such transaction is not completed, the undersigned's Securities shall remain subject to the restrictions contained in this Lock-Up Agreement or

(xiv) to the Underwriters in connection with the offering contemplated by the Underwriting Agreement

provided that,

(1) in the case of each transfer or distribution pursuant to clauses (i) through (viii) above, each donee, trustee, distributee or transferee, as the case may be, agrees to be bound in writing by the restrictions set forth herein,

(2) in the case of each transfer or distribution pursuant to clauses (i) through (viii) above, shall not involve a disposition for value and

(3) in the case of each transfer or distribution pursuant to clauses (i) through (vii) and (xii) above, no filing under Section 16(a) of the Exchange Act (other than a filing on Form 5) reporting a reduction in beneficial ownership of Securities, shall be required or shall be voluntarily made during the Lock-Up Period.

For purposes of this Lock-Up Agreement, a "family member" shall mean any relationship by blood, marriage, domestic partnership or adoption, not more remote than first cousin. For the purposes of clause (xiv) above, "change of control" shall mean the consummation of any bona fide third party tender offer, merger, purchase, consolidation or other similar transaction the result of which is that any "person" (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of a majority of total voting power of the voting stock of the Company.

Notwithstanding anything herein to the contrary, the undersigned may enter into a written trading plan established pursuant to Rule 10b5-1 of the Exchange Act during the Lock-Up Period; provided that no direct or indirect offers, pledges, sales, contracts to sell, sales of any option or contract to purchase, purchases of any option or contract to sell, grants of any option, right or warrant to purchase, loans, or other transfers or disposals of any Securities or any securities convertible into or exercisable or exchangeable for Securities may be effected pursuant to such

plan during the Lock-Up Period; and provided that no public announcement or filing under the Exchange Act regarding the establishment of such plan shall be required of or voluntarily made by or on behalf of the undersigned or the Company during the Lock-Up Period.

In addition, notwithstanding the foregoing, if the undersigned is a corporation, the corporation may transfer the Securities to any wholly-owned subsidiary of such corporation; provided, however, that in any such case, it shall be a condition to the transfer that the transferee execute an agreement stating that the transferee is receiving and holding such Securities subject to the provisions of this Agreement and there shall be no further transfer of such Securities except in accordance with this Agreement, and provided further that any such transfer shall not involve a disposition for value.

In furtherance of the foregoing, the Company and its transfer agent and registrar are hereby authorized to decline to make any transfer of Securities if such transfer would constitute a violation or breach of this Lock-Up Agreement.

If the undersigned is an officer or director of the Company, (i) the Representatives agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of Securities, the Representatives will notify the Company of the impending release or waiver, and (ii) the Company has agreed in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representatives hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this Lock-Up Agreement to the extent and for the duration that such terms remain in effect at the time of the transfer.

This Lock-Up Agreement shall be binding on the undersigned and the successors, heirs, personal representatives and assigns of the undersigned. This Lock-Up Agreement shall lapse and become null and void on the earlier of (i) June 30, 2017, if the Public Offering Date shall not have occurred on or such date, (ii) the date on which for any reason the Underwriting Agreement is terminated (other than the provisions thereof that survive termination) prior to payment for and delivery of the Securities to be sold thereunder (other than pursuant to the Underwriters' over-allotment option), (iii) the date the Registration Statement filed with the Securities and Exchange Commission with respect to the Offering is withdrawn or (iv) the date the Company notifies the Representatives in writing prior to the execution of the Underwriting Agreement that it does not intend to proceed with the Offering.

This agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

[*Signature page follows*]

Very truly yours,

IF AN INDIVIDUAL:

By: _____
(duly authorized signature)

Name: _____
(please print full name)

Address:

_____

_____

IF AN ENTITY:

_____
(please print complete name of entity)

By: _____
(duly authorized signature)

Name: _____
(please print full name)

Address:

_____

_____

Exhibit H

Form of Directed Share Program Lock-Up Agreement

[ ], 2017

CREDIT SUISSE SECURITIES (USA) LLC
CITIGROUP GLOBAL MARKETS INC.
WELLS FARGO SECURITIES, LLC

As representatives of the several underwriters

c/o Wells Fargo Securities, LLC,
375 Park Avenue, 4th Floor
New York, New York 10152

Ladies and Gentlemen:

This agreement is being delivered to you in connection with the Directed Share Program (the "**DSP**") for the underwritten public offering (the "**Offering**") of the common stock, par value $0.01 per share (the "**Common Stock**"), of NCS Multistage Holdings, Inc., and any successor (by merger or otherwise) thereto (the "**Company**"), pursuant to the proposed Underwriting Agreement (the "**Underwriting Agreement**"), among the Company and Credit Suisse Securities (USA) LLC, Citigroup Global Markets Inc. and Wells Fargo Securities, LLC ("**Wells Fargo**"), as representatives of a group of underwriters named therein.

As an inducement to Wells Fargo to sell the Common Stock to the undersigned through the DSP (the "**Securities**") and in light of the benefits that the purchase of the Securities under the DSP will confer upon the undersigned, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby agrees that, if the undersigned purchases at least $50,000 worth of Securities under the DSP, during the period specified in the following paragraph (the "**Lock-Up Period**"), the undersigned will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any Securities or securities convertible into or exchangeable or exercisable for any Securities, enter into a transaction which would have the same effect, or enter into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of the Securities, whether any such aforementioned transaction is to be settled by delivery of the Securities or such other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition, or to enter into any such transaction, swap, hedge or other arrangement, without, in each case, the prior written consent of Wells Fargo. In addition, the undersigned agrees that, without the prior written consent of Wells Fargo, it will not, during the Lock-Up Period, make any demand for or exercise any right with respect to, the registration of any Securities or any security convertible into or exercisable or exchangeable for the Securities.

The Lock-Up Period will commence on the date of this Lock-Up Agreement and continue and include the date that is 30 days after the public offering date set forth on the final prospectus used to sell the Securities (the "**Public Offering Date**") pursuant to the Underwriting Agreement.

A transfer of Securities to a family member or trust may be made; provided that the transferee agrees to be bound in writing by the terms of this Lock-Up Agreement prior to such transfer, such transfer shall not involve a disposition for value and no filing by any party (donor, donee, transferor or transferee) under the Securities Exchange Act of 1934, as amended, shall be required or shall be voluntarily made in connection with such transfer (other than a filing on a Form 5 made after the expiration of the Lock-Up Period). For purposes of this Lock-Up Agreement, a "family member" shall mean any relationship by blood, marriage, domestic partnership or adoption, not more remote than first cousin.

In furtherance of the foregoing, the Company and its transfer agent and registrar are hereby authorized to decline to make any transfer of Securities if such transfer would constitute a violation or breach of this Lock-Up Agreement.

This Lock-Up Agreement shall be binding on the undersigned and the successors, heirs, personal representatives and assigns of the undersigned. This Lock-Up Agreement shall lapse and become null and void if the Public Offering Date shall not have occurred on or before [June 30, 2017]. **This agreement shall be governed by, and construed in accordance with, the laws of the State of New York.**

[*Signature page follows*]

Very truly yours,

By: _____

(duly authorized signature)

Name: _____

(please print full name)

Address: _____

_____

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF NCS MULTISTAGE HOLDINGS, INC.

(Under Sections 242 and 245 of the Delaware General Corporation Law)

NCS Multistage Holdings, Inc. (the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, as amended (the "DGCL"), does hereby certify as follows:

FIRST. The Corporation filed its original Certificate of Incorporation with the Secretary of State of the State of Delaware on November 28, 2012 under the name Pioneer Super Holdings, Inc., and the Corporation amended and restated its Certificate of Incorporation on December 19, 2012, further amended its Certificate of Incorporation on December 16, 2015 and further amended its Certificate of Incorporation on December 13, 2016, changing its name to NCS Multistage Holdings, Inc. (as amended to date, the "Previous Certificate of Incorporation").

SECOND. The Board of Directors of the Corporation (the "Board of Directors") adopted resolutions proposing to amend and restate the Previous Certificate of Incorporation, and the stockholders of the Corporation have duly approved the amendment and restatement.

THIRD. Pursuant to Sections 242 and 245 of the DGCL, this Amended and Restated Certificate of Incorporation (this "Certificate") restates, integrates and further amends the Previous Certificate of Incorporation of the Corporation to read in its entirety as follows:

ARTICLE I

1.1 Name. The name of the Corporation is:

NCS Multistage Holdings, Inc.

ARTICLE II

2.1 Address. The address of the Corporation's registered office in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, County of New Castle, Delaware 19808. The name of its registered agent for service of process in the State of Delaware at such address is Corporation Service Company.

ARTICLE III

3.1 Purpose. The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized and incorporated under the DGCL. Without limiting the generality of the foregoing, the Corporation shall have all of the powers conferred on corporations by the DGCL and other applicable law.

ARTICLE IV

4.1 Authorized Shares. The total number of shares of all classes of capital stock that the Corporation shall have authority to issue is [ ] ([ ]) shares, of which (i) [ ] ([ ]) shares shall be designated shares of common stock, par value $0.01 per share ("Common Stock") and (ii) [ ] ([ ]) shares shall be designated shares of preferred stock, par value $0.01 per share (the "Preferred Stock"), with one such share of Preferred Stock hereby designated as the "Special Voting Share." Notwithstanding anything to the contrary contained herein, the rights and preferences of the Common Stock shall at all times be subject to the rights and preferences of the Preferred Stock as may be set forth in one or more certificates of designations filed with the Secretary of State of the State of Delaware from time to time in accordance with the DGCL and this Certificate. The number of authorized shares of Preferred Stock and Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) from time to time by the affirmative vote of the holders of at least a majority of the voting power of the Corporation's then outstanding shares of stock entitled to vote thereon, voting together as a single class, irrespective of the provisions of Section 242(b)(2) of the DGCL (or any successor provision thereto), and no vote of the holders of any of the Common Stock or the Preferred Stock voting separately as a class or series shall be required therefor.

4.2 Common Stock. The Common Stock shall have the following powers, designations, preferences and rights and qualifications, limitations and restrictions:

(a) Voting. Each holder of record of shares of Common Stock shall be entitled to vote at all meetings of the stockholders of the Corporation and shall have one vote for each share of Common Stock held of record by such holder of record as of the applicable record date on any matter that is submitted to a vote of the stockholders of the Corporation; provided, however, that to the fullest extent permitted by law, holders of Common Stock, as such, shall have no voting power with respect to, and shall not be entitled to vote on, any amendment to this Certificate (including any certificate of designations relating to any series or class of Preferred Stock) that relates solely to the terms of one or more outstanding series or class(es) of Preferred Stock if the holders of such affected series or class(es) of Preferred Stock are entitled, either separately or together with the holders of one or more other such series or class(es), to vote thereon pursuant to applicable law or this Certificate (including any certificate of designations relating to any series or class of Preferred Stock); and provided further that the Board of Directors may issue or grant shares of Common Stock that are subject to vesting or forfeiture and that restrict or eliminate voting rights with respect to such shares until any such vesting criteria is satisfied or such forfeiture provisions lapse.

(b) Dividends and Distributions. Subject to the prior rights of all classes or series of stock at the time outstanding having prior rights as to dividends or other distributions, the holders of shares of Common Stock shall be entitled to receive such dividends and other distributions in cash, property, or stock as may be declared on the Common Stock by the Board of Directors from time to time out of assets or funds of the Corporation legally available therefor and shall share equally on a per share basis in all such dividends and other distributions.

(c) Liquidation, etc. Subject to the prior rights of creditors of the Corporation and the holders of all classes or series of stock at the time outstanding having prior rights as to distributions upon liquidation, dissolution or winding up of the Corporation, in the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of shares of Common Stock shall be entitled to receive their ratable and proportionate share of the remaining assets of the Corporation.

(d) No holder of shares of Common Stock shall have cumulative voting rights.

(e) No holder of shares of Common Stock shall be entitled to preemptive or subscription rights pursuant to this Certificate.

4.3 Preferred Stock. The Board of Directors is hereby expressly authorized, to the fullest extent as may now or hereafter be permitted by the DGCL, by resolution or resolutions, at any time and from time to time, to provide for the issuance of a share or shares of Preferred Stock in one or more series or classes and to fix for each such series or class (i) the number of shares constituting such series or class and the designation of such series or class, (ii) the voting powers (if any), whether full or limited, of the shares of such series or class, (iii) the powers, preferences, and relative, participating, optional or other special rights of the shares of each such series or class, and (iv) the qualifications, limitations, and restrictions thereof, and to cause to be filed with the Secretary of State of the State of Delaware a certificate of designation with respect thereto. Without limiting the generality of the foregoing, to the fullest extent as may now or hereafter be permitted by the DGCL, the authority of the Board of Directors with respect to the Preferred Stock and any series or class thereof shall include, but not be limited to, determination of the following:

(a) the number of shares constituting any series or class, which number the Board of Directors may thereafter increase or decrease (but not below the number of shares thereof then outstanding) and the distinctive designation of that series or class;

(b) the dividend rate or rates on the shares of any series or class, the terms and conditions upon which and the periods in respect of which dividends shall be payable, whether dividends shall be cumulative and, if so, from which date or dates, and the relative rights of priority, if any, of payment of dividends on shares of that series or class;

(c) whether any series or class shall have voting rights, in addition to the voting rights provided by applicable law, and, if so, the number of votes per share and the terms and conditions of such voting rights;

(d) whether any series or class shall have conversion privileges and, if so, the terms and conditions of conversion, including provision for adjustment of the conversion rate upon such events as the Board of Directors shall determine;

(e) whether the shares of any series or class shall be redeemable and, if so, the terms and conditions of such redemption, including the date or dates upon or after which they shall be redeemable and the amount per share payable in case of redemption, which amount may vary under different conditions and at different redemption dates;

(f) whether any series or class shall have a sinking fund for the redemption or purchase of shares of that series or class, and, if so, the terms and amount of such sinking fund;

(g) the rights of the shares of any series or class in the event of voluntary or involuntary liquidation, dissolution or winding up of the Corporation, and the relative rights of priority, if any, of payment of shares of that series or class; and

(h) any other powers, preferences, rights, qualifications, limitations, and restrictions of any series or class.

The powers, preferences and relative, participating, optional and other special rights of the shares of each series or class of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series or classes at any time outstanding. Unless otherwise provided in the resolution or resolutions providing for the issuance of such series or class of Preferred Stock, shares of Preferred Stock, regardless of series or class, which shall be issued and thereafter acquired by the Corporation through purchase, redemption, exchange, conversion or otherwise shall return to the status of authorized but unissued Preferred Stock, without designation as to series or class of Preferred Stock, and the Corporation shall have the right to reissue such shares.

4.4 Special Voting Share

(a) The holder of the Special Voting Share, except as otherwise required under applicable law or as set forth in (b) below, shall not be entitled to vote on any matter required or permitted to be voted upon by the holders of Common Stock of the Corporation.

(b) The holder of the Special Voting Share shall be entitled to vote in person or by proxy, on all matters that a holder of Common Stock is entitled to vote on (except as otherwise provided herein or by applicable law) and the holder of the Special Voting Share shall be entitled to cast on any such matter a number of votes equal to the number of Class A Exchangeable Shares (the "Exchangeable Shares") of NCS Multistage Inc., a corporation organized under the laws of the province of Alberta ("CanAmalco"), then outstanding that are not owned by the Corporation or its affiliates, multiplied by the Exchange Ratio (as defined in the articles of incorporation of CanAmalco).

(c) Except as otherwise provided herein or by law, the holder of the Special Voting Share and the holders of shares of Common Stock shall vote together as one class on all matters submitted to a vote of shareholders of the Corporation.

(d) Except as set forth herein, the holder of the Special Voting Share shall have no special voting rights, and its consent shall not be required (except to the extent it is entitled to vote with the holders of shares of Common Stock as set forth herein) for taking any corporate action.

(e) The holder of the Special Voting Share shall not have any rights hereunder to convert such share or exchange such share for any other shares of the Corporation. Except as specifically authorized under the Exchange Agreement, by and between the Corporation, CanAmalco and the holder of the Special Voting Share, the holder of the Special Voting Share shall have no power or authority to sell, transfer or otherwise deal in or with the Special Voting Share.

(f) At such time as no Exchangeable Shares (other than Exchangeable Shares owned by the Corporation and its affiliates) are outstanding, the Special Voting Share shall automatically be redeemed and canceled, with an amount equal to $10.00 due and payable upon such redemption.

(g) So long as any Exchangeable Shares (other than Exchangeable Shares owned by the Corporation and its affiliates) are outstanding, the number of Special Voting Shares shall not be increased or decreased and no other term of the Special Voting Share shall be amended, except upon approval of the holder of the outstanding Special Voting Share. So long as the Special Voting Share is outstanding, the Corporation shall (i) fully comply with all terms of the Exchangeable Shares applicable to the Corporation and with all contractual obligations of the Corporation associated with such Exchangeable Shares, and (ii) not amend alter, change or repeal this paragraph except upon the approval of the holder of the Special Voting Share.

(h) If the Special Voting Share is purchased or otherwise acquired by the Corporation in any manner whatsoever, then the Special Voting Share shall be retired and cancelled promptly after the acquisition thereof.

(i) The holder of the Special Voting Share shall not be entitled to receive dividends of the Corporation.

4.5 Power to Sell and Purchase Shares. Subject to the requirements of applicable law, the Corporation shall have the power to issue and sell all or any part of any shares of any class of stock herein or hereafter authorized to such persons, and for such consideration and for such corporate purposes, as the Board of Directors shall from time to time, in its discretion, determine, whether or not greater consideration could be received upon the issue or sale of the same number of shares of another class, and as otherwise permitted by law. Subject to the requirements of applicable law, the Corporation shall have the power to purchase any shares of any class of stock herein or hereafter authorized from such persons, and for such consideration and for such corporate purposes, as the Board of Directors shall from time to time, in its discretion, determine, whether or not less consideration could be paid upon the purchase of the same number of shares of another class, and as otherwise permitted by law.

ARTICLE V

5.1 Powers of the Board. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. In addition to the powers and authority expressly conferred upon them by applicable law or by this Certificate (including any certificate of designations relating to any series or class of Preferred Stock) or the Bylaws of the Corporation (the "Bylaws"), the Board of Directors is hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Corporation, except as otherwise specifically required by law or as otherwise provided in this Certificate (including any certificate of designations relating to any series or class of Preferred Stock).

5.2 Number of Directors. Upon the effectiveness of this Certificate (the "Effective Time"), the total number of directors constituting the entire Board of Directors shall be nine (9). Thereafter, the total number of directors constituting the entire Board of Directors shall be such number as may be fixed from time to time exclusively by resolution adopted by the affirmative vote of at least a majority of the Board then in office.

5.3 Classification. Subject to the terms of any one or more series or classes of Preferred Stock, and effective upon the Effective Time, the directors of the Corporation shall be divided into three classes designated Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire Board of Directors. The Board of Directors may assign members of the Board of Directors already in office to such classes as of the Effective Time. No director shall be a member of more than one class of directors. The term of office of the initial Class I directors shall expire at the first annual meeting of the stockholders following the Effective Time; the term of office of the initial Class II directors shall expire at the second annual meeting of the stockholders following the Effective Time; and the term of office of the initial Class III directors shall expire at the third annual meeting of the stockholders following the Effective Time. At each annual meeting of stockholders, commencing with the first annual meeting of stockholders following the Effective Time, successors to the class of directors whose term expires at that annual meeting shall be elected to hold office until the third annual meeting next succeeding his or her election and until his or her respective successor shall have been duly elected and qualified. Directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at a meeting and voting for nominees in the election of directors. If the number of directors is changed, any increase or decrease shall be apportioned among the classes in such a manner as the Board of Directors shall determine so as to maintain the number of directors in each class as nearly equal as possible, but in no case will a decrease in the number of directors shorten the term of any incumbent director.

5.4 Removal of Directors. Subject to the terms of any one or more series or classes of Preferred Stock, any director or the entire Board of Directors may be removed from office at any time, but only for cause and only by the affirmative vote of the holders of at least a majority of the voting power of the Corporation's outstanding shares of stock entitled to vote generally in the election of directors, voting together as a single class. For purposes of this Section 5.4, "cause" shall mean, with respect to any director, (i) the willful failure by such director to perform, or the gross negligence of such director in performing, the duties of a director, (ii) the engaging by such director in willful or serious misconduct that is injurious to the Corporation or (iii) the conviction of such director of, or the entering by such director of a plea of *nolo contendere* to, a crime that constitutes a felony.

5.5 Term. A director shall hold office until the annual meeting for the year in which his or her term expires and until his or her successor shall be elected and shall qualify, subject, however, to prior death, resignation, retirement or removal from office. A director may resign at any time upon written notice to the Corporation.

5.6 Vacancies. Subject to the terms of any one or more series or classes of Preferred Stock, any vacancies in the Board of Directors for any reason and any newly created directorships resulting by reason of any increase in the number of directors shall be filled only by the Board of Directors (and not by the stockholders), acting by a majority of the remaining directors then in office, even if less than a quorum, or by a sole remaining director, and any directors so appointed shall hold office until the next election of the class of directors to which such directors have been appointed and until their successors are duly elected and qualified.

5.7 Director Elections by Holders of Preferred Stock. Notwithstanding the foregoing, whenever the holders of any one or more series or classes of Preferred Stock shall have the right, voting separately by series or class, to elect one or more directors at an annual or special meeting of stockholders, the election, filling of vacancies, removal of directors and other features of such one or more directorships shall be governed by the terms of such one or more series or classes of Preferred Stock to the extent permitted by law.

5.8 Officers. Except as otherwise expressly delegated by resolution of the Board of Directors, the Board of Directors shall have the exclusive power and authority to appoint and remove officers of the Corporation.

ARTICLE VI

6.1 Elections of Directors. Elections of directors need not be by written ballot except and to the extent provided in the Bylaws of the Corporation.

6.2 Advance Notice. Advance notice of nominations for the election of directors or proposals of other business to be considered by stockholders, made other than by the Board of Directors or a duly authorized committee thereof or any authorized officer of the Corporation to whom the Board of Directors or such committee shall have delegated such authority, shall be given in the manner provided in the Bylaws of the Corporation. Without limiting the generality of the foregoing, the Bylaws may require that such advance notice include such information as the Board of Directors may deem appropriate or useful.

6.3 No Stockholder Action by Consent. Subject to the terms of any one or more series or classes of Preferred Stock, from and after the time that Advent International Corporation ("Advent"), a Delaware corporation, and its affiliates collectively, beneficially own (as shall be determined in accordance with Rules 13d-3 and 13d-5 of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) less than 50.01% of the then outstanding shares of the Common Stock, then any action required or permitted to be taken by the stockholders of the Corporation must be effected at a duly called annual or special meeting of such stockholders of the Corporation and may not be effected by any written consent in lieu of a meeting by such stockholders, unless the directors then in office unanimously recommend that such action be permitted to be taken by written consent of stockholders. In the event that an action is permitted to be taken by written consent of stockholders in accordance with this Section 6.3 and a signed written consent(s) (and any related revocation(s)) is (are) delivered to the Corporation in the manner provided by applicable law, the Corporation may engage independent inspectors of elections for the purpose of performing promptly a ministerial review of the validity of the consents and revocations. In the event the Corporation engages such inspectors, then for the purpose of permitting the inspectors to perform such review no action by written consent in lieu of a meeting of stockholders shall be effective until such inspectors have completed their review, determined that the requisite number of valid and unrevoked consents delivered to the Corporation in accordance with applicable law have been obtained to take the action specified in the consents, and certified such determination for entry in the records of the Corporation kept for

the purpose of recording the proceedings of meetings of stockholders, and such action by written consent will take effect as of the date and time of the certification of the written consents and will not relate back to the date the written consents to take action were delivered to the Corporation. For purposes of this Section 6.3, Section 7.2(c) and Article X below, "affiliates" shall mean, with respect to a given person, any person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the person specified; provided, however, that for the purposes of this definition none of (i) the Corporation, its subsidiaries and any entities (including corporations, partnerships, limited liability companies or other persons) in which the Corporation or its subsidiaries hold, directly or indirectly, an ownership interest, on the one hand, or (ii) Advent and its affiliates (excluding the Corporation, its subsidiaries or other entities described in clause (i)), on the other hand, shall be deemed to be "affiliates" of one another. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlled by" and "under common control with") as applied to any person means the possession, direct or indirect, of the power to direct or cause the direction of the management policies of a person, whether through the ownership of voting securities, by contract, or otherwise.

6.4 Postponement, Conduct and Adjournment of Meetings. Any meeting of stockholders may be postponed by action of the Board of Directors at any time in advance of such meeting. The Board of Directors shall have the power to adopt such rules and regulations for the conduct of the meetings and management of the affairs of the Corporation as they may deem proper and the power to adjourn any meeting of stockholders without a vote of the stockholders, which powers may be delegated by the Board of Directors to the Chairperson of such meeting in either such rules and regulations or pursuant to the Bylaws of the Corporation.

6.5 Special Meetings of Stockholders. Subject to the terms of any one or more series or classes of Preferred Stock, special meetings of the stockholders of the Corporation, for any purpose or purposes, may be called at any time, but only by or at the direction of a majority of the directors then in office, the Chairperson of the Board or the Chief Executive Officer of the Corporation, except as otherwise provided in the Corporation's Bylaws.

ARTICLE VII

7.1 Limited Liability of Directors. To the fullest extent permitted by the DGCL, as the same exists or as may hereafter be amended, no director of the Corporation shall have any personal liability to the Corporation or any of its stockholders for monetary damages for any breach of fiduciary duty as a director. If the DGCL is amended hereafter to permit the further elimination or limitation of the liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended, without further action by the Corporation. Any alteration, amendment, addition to or repeal of this Section 7.1, or adoption of any provision of this Certificate (including any certificate of designations relating to any series or class of Preferred Stock) inconsistent with this Section 7.1, shall not reduce, eliminate or adversely affect any right or protection of a director of the Corporation existing at the time of such alteration, amendment, addition to, repeal or adoption with respect to acts or omissions occurring prior to such alteration, amendment, addition to, repeal or adoption.

7.2 Indemnification and Advancement. The Corporation shall indemnify, advance expenses to and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (Indemnitee) who was or is made or is threatened to be made a party or is otherwise involved in any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by or in the right of the Corporation or otherwise and whether of a civil (including intentional or unintentional tort claims), criminal, administrative or investigative (formal or informal) nature, including appeal therefrom, in which Indemnitee was, is, will or might be involved as a party, potential party, non-party witness or otherwise by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Corporation, by reason of any action (or failure to act) taken by him or her of any action (or failure to act) on his or her part while acting as a director, officer, employee or agent of the Corporation, or by reason of the fact that Indemnitee is or was serving at the request of the Corporation as a director, officer, trustee, general partner, managing member, fiduciary, employee or agent of any other Enterprise, in each case whether or not serving in such capacity at the time any liability or expense is incurred for which indemnification, reimbursement, or advancement of expenses can be provided under this Section 7.2. "Enterprise" means the Corporation and any other corporation, constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger to which the Corporation (or any of their wholly owned subsidiaries) is a party, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise, of which Indemnitee is or was serving at the request of the Corporation as a director, officer, trustee, general partner, managing member, fiduciary, employee or agent.

7.3 Change in Rights. Neither any amendment nor repeal of this Article VII, nor the adoption of any provision of this Certificate inconsistent with this Article VII, shall eliminate or reduce the effect of this Article VII in respect of any acts or omissions occurring prior to such alteration, amendment, addition to, repeal or adoption.

ARTICLE VIII

8.1 Delaware. Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to any provision contained in the DGCL) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

ARTICLE IX

9.1 Amendments to Bylaws. In furtherance and not in limitation of the powers conferred upon it by the laws of the State of Delaware, the Board of Directors is expressly authorized and empowered to make, alter, amend, add to or repeal any and all Bylaws of the Corporation by a majority of the directors then in office. Notwithstanding anything to the contrary contained in this Certificate (including any certificate of designations relating to any series or class of Preferred Stock), the affirmative vote of the holders of at least 66 2/3% of the voting power of the Corporation's then outstanding shares entitled to vote generally in the election of directors, voting together as a single class, shall be required for the stockholders to make, alter, amend, add to or repeal any or all Bylaws of the Corporation or to adopt any provision inconsistent therewith.

ARTICLE X

10.1 Section 203 of the DGCL. The Corporation shall not be governed by Section 203 of the DGCL ("Section 203"), and the restrictions contained in Section 203 shall not apply to the Corporation.

10.2 Corporate Opportunities. To the fullest extent permitted by Section 122(17) of the DGCL and except as may be otherwise expressly agreed in writing by the Corporation and Advent, the Corporation, on behalf of itself and its subsidiaries, renounces any interest or expectancy of the Corporation and its subsidiaries in, or in being offered an opportunity to participate in, business opportunities, which are from time to time presented to Advent or any of its managers, officers, directors, agents, stockholders, members, partners, affiliates and subsidiaries (other than the Corporation and its subsidiaries), even if the opportunity is one that the Corporation or its subsidiaries might reasonably be deemed to have pursued or had the ability or desire to pursue if granted the opportunity to do so, and no such person or entity shall be liable to the Corporation or any of its subsidiaries for breach of any fiduciary or other duty, as a director or officer or otherwise, by reason of the fact that such person or entity pursues or acquires such business opportunity, directs such business opportunity to another person or entity or fails to present such business opportunity, or information regarding such business opportunity, to the Corporation or its subsidiaries unless, in the case of any such person who is a director or officer of the Corporation, such business opportunity is expressly offered to such director or officer in writing solely in his or her capacity as a director or officer of the Corporation. Neither the alteration, amendment, addition to or repeal of this Article X, nor the adoption of any provision of this Certificate (including any certificate of designations relating to any series or class of Preferred Stock) inconsistent with this Article X, shall eliminate or reduce the effect of this Article X in respect of any business opportunity first identified or any other matter occurring, or any cause of action, suit or claim that, but for this Article X, would accrue or arise, prior to such alteration, amendment, addition, repeal or adoption.

10.3 Amendments to Article X. Notwithstanding anything to the contrary in this Certificate or the Bylaws of the Corporation, for as long as Advent and its affiliates collectively beneficially own shares of stock of the Corporation representing at least 10% of the Corporation's then outstanding shares entitled to vote generally in the election of directors, this Article X shall not be amended, altered or revised, including by merger or otherwise, without Advent's prior written consent.

ARTICLE XI

11.1 Forum. Unless the Corporation consents in writing in advance to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (A) any derivative action or proceeding brought on behalf of the Corporation, (B) any action asserting a claim of breach of a fiduciary duty owed by, or any wrongdoing by, any director, officer or employee of the Corporation to the Corporation or the Corporation's stockholders, (C) any action asserting a claim arising pursuant

to any provision of the DGCL, this Certificate (including as it may be amended from time to time), or the Bylaws, (D) any action to interpret, apply, enforce or determine the validity of this Certificate or the Bylaws, or (E) any action asserting a claim governed by the internal affairs doctrine, except for, as to each of (A) through (E) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the personal jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten (10) days following such determination). To the fullest extent permitted by law, any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article XI.

ARTICLE XII

12.1 Amendment. The Corporation reserves the right, at any time and from time to time, to alter, amend, add to or repeal any provision contained in this Certificate (including any certificate of designations relating to any series or class of Preferred Stock) in any manner now or hereafter prescribed by the laws of the State of Delaware, and all rights, preferences, privileges and powers of any nature conferred upon stockholders, directors or any other persons herein are granted subject to this reservation; provided, however, that notwithstanding any other provision of this Certificate (including any certificate of designations relating to any series or class of Preferred Stock), and in addition to any other vote that may be required by this Certificate or any provision of law, the affirmative vote of the holders of at least 66 2/3% of the voting power of the Corporation's then outstanding shares of stock entitled to vote generally in the election of directors, voting together as a single class, shall be required to alter, amend, add to or repeal, or to adopt any provision inconsistent with, Sections 5.3, 5.4 and 5.6 of Article V, Section 6.5 of Article VI, Article XI hereof or this proviso of this Article XII.

ARTICLE XIII

13.1 Severability. If any provision (or any part thereof) of this Certificate shall be held to be invalid, illegal or unenforceable as applied to any circumstance for any reason whatsoever: (i) the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Certificate including, without limitation, each portion of any section of this Certificate containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and (ii) to the fullest extent possible, the provisions of this Certificate (including, without limitation, each such containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to permit the Corporation to protect its directors, officers, employees and agents from personal liability in respect of their good faith service or for the benefit of the Corporation to the fullest extent permitted by law.

[*The remainder of this page is intentionally left blank.*]

IN WITNESS WHEREOF, the Corporation has caused this Certificate to be executed on its behalf [ ] day of [ ], 2017.

NCS Multistage Holdings, Inc.

By: _____
Name:
Title:

FORM OF AMENDED AND RESTATED BYLAWS

OF

NCS MULTISTAGE HOLDINGS, INC.
(a Delaware corporation)

Effective [ ], 2017

ARTICLE I

STOCKHOLDERS

Section 1.01. Annual Meetings. The annual meeting of the stockholders of NCS Multistage Holdings, Inc. (the "Corporation") for the election of directors and for the transaction of such other business as properly may come before such meeting shall be held at such place, either within or without the State of Delaware, or, within the sole discretion of the Board of Directors of the Corporation (the "Board of Directors" or "Board"), and subject to such guidelines and procedures as the Board of Directors may adopt, by means of remote communication as authorized by the General Corporation Law of the State of Delaware (the "DGCL"), and at such date and at such time as may be fixed from time to time by resolution of the Board of Directors and set forth in the notice or waiver of notice of the meeting.

Section 1.02. Special Meetings. Subject to the terms of any one or more series or classes of Preferred Stock, special meetings of the stockholders of the Corporation, for any purpose or purposes, may be called at any time, but only by or at the direction of a majority of the directors then in office, the Chairperson of the Board of Directors or the Chief Executive Officer of the Corporation. The ability of stockholders to call a special meeting of stockholders is specifically denied. Any such special meetings of the stockholders shall be held at such places, within or without the State of Delaware, or, within the sole discretion of the Board of Directors, and subject to such guidelines and procedures as the Board of Directors may adopt, by means of remote communication as authorized by the DGCL, as shall be specified in the respective notices or waivers of notice thereof.

Section 1.03. No Stockholder Action by Consent. Subject to the terms of any one or more series or classes of Preferred Stock, from and after the time that Advent International Corporation ("Advent") and its affiliates beneficially own (as determined in accordance with Rules 13d-3 and 13d-5 of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) less than 50.01% of the then outstanding shares of the common stock of the Corporation, then any action required or permitted to be taken by the stockholders of the Corporation must be effected at a duly called annual or special meeting of such stockholders of the Corporation and may not be effected by any written consent in lieu of a meeting by such stockholders, unless the directors then in office

unanimously recommend that such action be permitted to be taken by written consent of stockholders. In the event that an action is permitted to be taken by written consent of stockholders in accordance with this Section 1.03 and a signed written consent(s) (and any related revocation(s)) is (are) delivered to the Corporation in the manner provided by applicable law, the Corporation may engage independent inspectors of elections for the purpose of performing promptly a ministerial review of the validity of the consents and revocations. In the event the Corporation engages such inspectors, then for the purpose of permitting the inspectors to perform such review no action by written consent in lieu of a meeting of stockholders shall be effective until such inspectors have completed their review, determined that the requisite number of valid and unrevoked consents delivered to the Corporation in accordance with applicable law have been obtained to take the action specified in the consents, and certified such determination for entry in the records of the Corporation kept for the purpose of recording the proceedings of meetings of stockholders, and such action by written consent will take effect as of the date and time of the certification of the written consents and will not relate back to the date the written consents to take action were delivered to the Corporation. For purposes of this Article I, "affiliates" shall have the meaning set forth in Section 1.12(c)(iii) below; provided, however, that for the purposes of this definition none of (i) the Corporation, its subsidiaries and any entities (including corporations, partnerships, limited liability companies or other persons) in which the Corporation or its subsidiaries hold, directly or indirectly, an ownership interest, on the one hand, or (ii) Advent and its affiliates (excluding the Corporation, its subsidiaries or other entities described in clause (i)), on the other hand, shall be deemed to be "affiliates" of one another.

Section 1.04. Notice of Meetings; Waiver.

(a) Unless otherwise prescribed by statute or the Certificate of Incorporation of the Corporation (as it may be amended from time to time, the "Certificate of Incorporation"), the Secretary of the Corporation or any Assistant Secretary shall cause written notice of the place, if any, date and hour of each meeting of the stockholders, and, in the case of a special meeting, the purpose or purposes for which such meeting is called, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, to be given personally by mail or by electronic transmission, or as otherwise provided in these Bylaws, not fewer than ten (10) nor more than sixty (60) days prior to the meeting, or in the case of a meeting called for the purpose of acting upon a merger or consolidation not fewer than twenty (20) nor more than sixty (60) days prior to the meeting, to each stockholder of record entitled to vote at such meeting. If such notice is mailed, it shall be deemed to have been given personally to a stockholder when deposited in the United States mail, postage prepaid, directed to the stockholder at his or her address as it appears on the record of stockholders of the Corporation, or, if a stockholder shall have filed with the Secretary of the Corporation a written request that notices to such stockholder be mailed to some other address, then directed to such stockholder at such other address. If such notice is delivered (rather than mailed) to the stockholder's address, the notice shall be deemed to be given when delivered. Such further notice shall be given as may be required by law.

(b) A written waiver of any notice of any annual or special meeting signed by the person entitled thereto, or a waiver by electronic transmission by the person entitled to notice, shall be deemed equivalent to notice. Neither the business to be transacted at, nor the purpose of, any annual or special meeting of the stockholders need be specified in a written waiver of notice. Attendance of a stockholder at a meeting of stockholders shall constitute a waiver of notice of such meeting, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business on the ground that the meeting is not lawfully called or convened.

(c) For notice given by electronic transmission to a stockholder to be effective, such stockholder must consent to the Corporation's giving notice by that particular form of electronic transmission. A stockholder may revoke consent to receive notice by electronic transmission by written notice to the Corporation. A stockholder's consent to notice by electronic transmission is automatically revoked if the Corporation is unable to deliver two consecutive electronic transmission notices and such inability becomes known to the Secretary of the Corporation, any Assistant Secretary, the transfer agent or other person responsible for giving notice.

(d) Notices are deemed given (i) if by facsimile, when faxed to a number where the stockholder has consented to receive notice; (ii) if by electronic mail, when mailed electronically to an electronic mail address at which the stockholder has consented to receive such notice; (iii) if by posting on an electronic network (such as a website or chatroom) together with a separate notice to the stockholder of such specific posting, upon the later to occur of (A) such posting or (B) the giving of the separate notice of such posting; or (iv) if by any other form of electronic communication, when directed to the stockholder in the manner consented to by the stockholder.

(e) If a stockholder meeting is to be held by means of remote communication and stockholders will take action at such meeting, the notice of such meeting must: (i) specify the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present and vote at such meeting; and (ii) provide the information required to access the stockholder list. A waiver of notice may be given by electronic transmission.

Section 1.05. Quorum. Except as otherwise required by law or by the Certificate of Incorporation, at each meeting of stockholders the presence in person or by proxy of the holders of record of a majority in voting power of the shares entitled to vote at a meeting of stockholders shall constitute a quorum for the transaction of business at such meeting; it being understood that to the extent the Board of Directors issues or grants any shares that are subject to vesting or forfeiture and restrict or eliminate voting rights with respect to such shares until such vesting criteria is satisfied or such forfeiture provisions lapse, any such unvested shares shall not be considered to have the power to

vote at a meeting of stockholders. Where a separate vote by one or more classes or series is required, the presence in person or by proxy of the holders of record of a majority in voting power of the shares entitled to vote shall constitute a quorum entitled to take action with respect to that vote on that matter. Shares of its own stock belonging to the Corporation or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation is held, directly or indirectly, by the Corporation, shall neither be entitled to vote nor be counted for quorum purposes; provided, however, that the foregoing shall not limit the right of the Corporation or any subsidiary of the Corporation to vote stock, including, but not limited to, its own stock, held by it in a fiduciary capacity.

Section 1.06. Voting.

(a) If, pursuant to Section 5.05 of these Bylaws, a record date has been fixed, every holder of record of shares entitled to vote at a meeting of stockholders shall, subject to the terms of any one or more series or classes of Preferred Stock, be entitled to one (1) vote for each share outstanding in his or her name on the books of the Corporation at the close of business on such record date. If no record date has been fixed, then every holder of record of shares entitled to vote at a meeting of stockholders shall, subject to the terms of any one or more series or classes of Preferred Stock, be entitled to one (1) vote for each share of stock standing in his or her name on the books of the Corporation at the close of business on the day next preceding the day on which notice of the meeting is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(b) Except as otherwise required by law, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at a meeting and voting for nominees in the election of directors, and, in all other matters, by the affirmative vote of a majority of the votes properly cast for or against such matter, and, for the avoidance of doubt, neither abstentions nor broker non-votes shall be counted as votes cast for or against such matter.

Section 1.07. Voting by Ballot. No vote of the stockholders on an election of directors need be taken by written ballot or by electronic transmission unless otherwise provided in the Certificate of Incorporation or required by law. Any vote not required to be taken by ballot or by electronic transmission may be conducted in any manner approved by the Board of Directors prior to the meeting at which such vote is taken.

Section 1.08. Postponement and Adjournment. Any meeting of stockholders may be postponed by action of the Board of Directors at any time in advance of such meeting. If a quorum is not present at any meeting of the stockholders, the Chairperson of such meeting shall have the power to adjourn the meeting without a vote of the stockholders. Notice of any adjourned meeting of the stockholders of the Corporation need not be given if the place, if any, date and hour thereof are announced at the meeting at which the adjournment is taken, provided, however, that if the adjournment is for more than thirty (30) days, or if after the adjournment a new record date for the adjourned

meeting is fixed pursuant to Section 5.05 of these Bylaws, a notice of the adjourned meeting, conforming to the requirements of Section 1.04 of these Bylaws, shall be given to each stockholder of record entitled to vote at such meeting. At any adjourned meeting at which a quorum is present, any business may be transacted that might have been transacted on the original date of the meeting.

Section 1.09. Proxies. Any stockholder entitled to vote at any meeting of the stockholders may authorize another person or persons to vote at any such meeting and express such vote on behalf of him or her by proxy. A stockholder may authorize a valid proxy by executing a written instrument signed by such stockholder, or by causing his or her signature to be affixed to such writing by any reasonable means including, but not limited to, by facsimile signature, or by transmitting or authorizing the transmission of a telegram, cablegram or other means of electronic transmission to the person designated as the holder of the proxy, a proxy solicitation firm or a like authorized agent. Such proxy must be filed with the Secretary of the Corporation before or at the time of the meeting at which such proxy will be voted. No such proxy shall be voted or acted upon after the expiration of three (3) years from the date of such proxy, unless such proxy provides for a longer period. A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest. A proxy may be made irrevocable regardless of whether the interest with which it is coupled is an interest in the stock itself or an interest in the Corporation generally. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing with the Secretary of the Corporation either an instrument in writing revoking the proxy or another duly executed proxy bearing a later date. Proxies by telegram, cablegram, facsimile or other electronic transmission must either set forth or be submitted with information from which it can be determined that the telegram, cablegram, facsimile or other electronic transmission was authorized by the stockholder. Any copy, facsimile telecommunication or other reliable reproduction of a writing or transmission created pursuant to this section may be substituted or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission.

Section 1.10. Organization; Procedure. At every meeting of stockholders, the Chairperson of such meeting shall be the Chairperson of the Board or, if no Chairperson of the Board has been elected or in the event of his or her absence or disability, a Chairperson chosen by the Board of Directors. The Secretary of the Corporation, or in the event of his or her absence or disability, an Assistant Secretary, if any, or if there be no Assistant Secretary, in the absence of the Secretary of the Corporation, an appointee of the Chairperson of the meeting, shall act as Secretary of the meeting. The order of business and all other matters of procedure at every meeting of stockholders may be determined by the Chairperson of such meeting.

Section 1.11. Business at Annual and Special Meetings. No business may be transacted at an annual or special meeting of stockholders other than business that is:

(a) specified in a notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors or a duly authorized committee thereof,

(b) otherwise brought before the meeting by or at the direction of the Board of Directors or a duly authorized committee thereof or any authorized officer of the Corporation to whom the Board of Directors or such committee shall have delegated such authority, or

(c) otherwise brought before the meeting by a "Noticing Stockholder" who complies with the notice procedures set forth in Section 1.12 of these Bylaws.

A "Noticing Stockholder" must be either a "Record Holder" or a "Nominee Holder." A "Record Holder" is a stockholder that holds of record stock of the Corporation entitled to vote at the meeting on the business (including any election of a director) to be appropriately conducted at the meeting. A "Nominee Holder" is a stockholder that holds such stock through a nominee or "street name" holder of record and can demonstrate to the Corporation such indirect ownership of such stock and such Nominee Holder's entitlement to vote such stock on such business. Clause (c) of this Section 1.11 shall be the exclusive means for a Noticing Stockholder to make director nominations or submit other business before a meeting of stockholders (other than proposals brought under Rule 14a-8 under the Exchange Act and included in the Corporation's notice of meeting, which proposals are not governed by these Bylaws). Notwithstanding anything in these Bylaws to the contrary, no business shall be conducted at a stockholders' meeting except in accordance with the procedures set forth in Section 1.11 and Section 1.12 of these Bylaws.

Section 1.12. Notice of Stockholder Business and Nominations. In order for a Noticing Stockholder to properly bring any item of business before a meeting of stockholders, the Noticing Stockholder must give timely notice thereof in writing to the Secretary of the Corporation in compliance with the requirements of this Section 1.12. This Section 1.12 shall constitute an "advance notice provision" for annual meetings for purposes of Rule 14a-4(c)(1) under the Exchange Act.

(a) To be timely, a Noticing Stockholder's notice shall be delivered to the Secretary at the principal executive offices of the Corporation:

(i) in the case of an annual meeting of stockholders, not earlier than the close of business on the one-hundred twentieth (120th) day and not later than the close of business on the ninetieth (90th) day prior to the first anniversary of the preceding year's annual meeting(which date shall be June [30], 2017, for purposes of the Corporation's first annual meeting of stockholders after its shares of common stock are first publicly traded); provided, however, that in the event the date of the annual meeting is more than thirty (30) days before or more than

sixty (60) days after such anniversary date, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the one-hundred twentieth (120th) day prior to the date of such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to the date of such annual meeting or, if the first public announcement of the date of such annual meeting is less than one hundred (100) days prior to the date of such annual meeting, the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by the Corporation;

(ii) in the case of a special meeting of stockholders called for the purpose of electing directors, not earlier than the close of business on the one-hundred twentieth (120th) day prior to such special meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such special meeting or the tenth (10th) day following the date on which notice of the date of the special meeting was mailed or public disclosure of the date of the special meeting was made, whichever first occurs; and

(iii) in no event shall any adjournment or postponement of an annual or special meeting, or the announcement thereof, commence a new time period for the giving of a stockholder's notice as described above.

(b) To be in proper form, whether in regard to a nominee for election to the Board of Directors or other business, a Noticing Stockholder's notice to the Secretary must:

(i) set forth, as to the Noticing Stockholder and, if the Noticing Stockholder holds for the benefit of another, the beneficial owner on whose behalf the nomination or proposal is made, the following information together with a representation as to the accuracy of the information:

(A) the name and address of the Noticing Stockholder as they appear on the Corporation's books and, if the Noticing Stockholder holds for the benefit of another, the name and address of such beneficial owner (collectively "Holder");

(B) the class or series and number of shares of the Corporation that are, directly or indirectly, owned of record or beneficially owned (within the meaning of Rule 13d-3 under the Exchange Act) by the Holder or any Stockholder Associated Person of the Noticing Stockholder (except that such Holder or Stockholder Associated Person of the Noticing Stockholder shall in all events be deemed to beneficially own any shares of any class or series of the Corporation as to which such Holder or Stockholder Associated Person of the Noticing Stockholder has a right to acquire beneficial ownership at any time in the future) and the date such ownership was acquired;

(C) any option, warrant, convertible security, stock appreciation right, or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class or series of shares of the Corporation or with a value derived in whole or in part from the price, value or volatility of any class or series of shares of the Corporation, whether or not the instrument or right shall be subject to settlement in the underlying class or series of capital stock of the Corporation or otherwise (a "Derivative Instrument") that is directly or indirectly owned beneficially by the Holder or any Stockholder Associated Person of the Noticing Stockholder and any other direct or indirect opportunity to profit or share in any profit derived from any increase or decrease in the price, value or volatility of shares of the Corporation;

(D) any proxy, contract, arrangement, understanding or relationship pursuant to which the Holder or Stockholder Associated Person of the Noticing Stockholder has a right to vote or has granted a right to vote any shares of any security of the Corporation;

(E) any short interest in any security of the Corporation (for purposes of these Bylaws a person shall be deemed to have a short interest in a security if the Holder or any Stockholder Associated Person of the Noticing Stockholder directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has the opportunity to profit or share in any profit derived from any decrease in the value of the subject security);

(F) any rights to dividends on the shares of any security of the Corporation owned beneficially by the Holder or any Stockholder Associated Person of the Noticing Stockholder that are separated or separable from the underlying shares of the Corporation;

(G) any proportionate interest in shares of the Corporation or Derivative Instruments held, directly or indirectly, by a general or limited partnership or limited liability company or similar entity in which the Holder or any Stockholder Associated Person of the Noticing Stockholder is a general partner or, directly or indirectly, beneficially owns an interest in a general partner, is the manager, managing member or directly or indirectly beneficially owns an interest in the manager or managing member of a limited liability company or similar entity;

(H) any performance-related fees (other than an asset-based fee) that the Holder or any Stockholder Associated Person of the Noticing Stockholder is entitled to based on any increase or decrease in the value of shares of the Corporation or Derivative Instruments or short interests, if any;

(I) any arrangements, rights, or other interests described in Sections 1.12(b)(i)(C)-(H) held by members of such Holder's immediate family sharing the same household;

(J) a representation that the Noticing Stockholder intends to appear in person or by proxy at the meeting to nominate the person(s) named or propose the business specified in the notice and whether or not such stockholder intends to deliver a proxy statement and/or form of proxy to holders of at least the percentage of the Corporation's outstanding shares required to approve the nomination(s) or the business proposed and/or otherwise to solicit proxies from stockholders in support of the nomination(s) or the business proposed;

(K) a certification regarding whether or not such Holder and any Stockholder Associated Person of the Noticing Stockholder have complied with all applicable federal, state and other legal requirements in connection with such Holder's and/or Stockholder Associated Persons' acquisition of shares or other securities of the Corporation and/or such Holder's and/or Stockholder Associated Persons' acts or omissions as a stockholder of the Corporation;

(L) any other information relating to the Holder and/or Stockholder Associated Person of the Noticing Stockholder that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for, as applicable, the proposal and/or for the election of directors in a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations thereunder; and

(M) any other information as reasonably requested by the Corporation.

Such information shall be provided as of the date of the notice and shall be supplemented by the Holder not later than ten (10) days after the record date for the meeting to disclose such ownership as of the record date.

(ii) If the notice relates to any business other than a nomination of a director or directors that the stockholder proposes to bring before the meeting, the notice must set forth:

(A) a reasonably detailed description of the business desired to be brought before the meeting (including the text of any resolutions proposed for consideration), the reasons for conducting such business at the meeting, and any material direct or indirect interest of the Holder or any Stockholder Associated Persons in such business; and

(B) a reasonably detailed description of all agreements, arrangements and understandings, direct and indirect, between the Holder, and any other person or persons (including their names) in connection with the proposal of such business by the Holder.

(iii) set forth, as to each person, if any, whom the Holder proposes to nominate for election or reelection to the Board of Directors:

(A) all information with respect to such proposed nominee that would be required to be set forth in a Noticing Stockholder's notice pursuant to this Section 1.12 if such proposed nominee were a Noticing Stockholder;

(B) all information relating to the nominee (including, without limitation, the nominee's name, age, business and residence address and principal occupation or employment and the class or series and number of shares of capital stock of the Corporation that are owned beneficially or of record by the nominee) that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors in a contested election pursuant to Section 14 of the Exchange Act and the rules and regulations thereunder (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected);

(C) a description of any agreements, arrangements and understandings between or among such stockholder or any Stockholder Associated Person, on the one hand, and any other persons (including any Stockholder Associated Person), on the other hand, in connection with the nomination of such person for election as a director; and

(D) a description of all direct and indirect compensation and other material monetary agreements, arrangements, and understandings during the past three years, and any other material relationships, between or among the Holder and respective affiliates and associates, or others acting in concert therewith, on the one hand, and each proposed nominee, and his or her respective affiliates and associates, or others acting in concert therewith, on the other hand, including, without limitation all information that would be required to be disclosed pursuant to Item 404 of Regulation S-K if the Holder making the nomination or on whose behalf the nomination is made, if any, or any affiliate or associate thereof or person acting in concert therewith, were the "registrant" for purposes of Item 404 and the nominee were a director or executive officer of such registrant.

(iv) with respect to each nominee for election or reelection to the Board of Directors, the Noticing Stockholder shall include a completed and signed questionnaire, representation, and agreement required by Section 1.13 of these Bylaws. The Corporation may require any proposed nominee to furnish such other information as may reasonably be required by the Corporation to determine the eligibility of the proposed nominee to serve as an independent director of the Corporation or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of the nominee.

(c) For purposes of these Bylaws:

(i) "public announcement" shall mean disclosure in a press release reported by a national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14, or 15(d) of the Exchange Act and the rules and regulations thereunder;

(ii) "Stockholder Associated Person" means, with respect to any stockholder, (A) any person acting in concert with such stockholder, (B) any beneficial owner of shares of stock of the Corporation owned of record or beneficially by such stockholder (other than a stockholder that is a depositary) and (C) any person controlling, controlled by or under common control with any stockholder, or any Stockholder Associated Person identified in clauses (A) or (B) above; and

(iii) "Affiliate" and "Associate" are defined by reference to Rule 12b-2 under the Exchange Act. An "affiliate" is any "person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the person specified." "Control" is defined as the "possession, direct or indirect, of the power to direct or cause the direction of the management policies of a person, whether through the ownership of voting securities, by contract, or otherwise." The term "associate" of a person means: (i) any corporation or organization (other than the registrant or a majority-owned subsidiary of the registrant) of which such person is an officer or partner or is, directly or indirectly, the beneficial owner of ten (10) percent or more of any class of equity securities, (ii) any trust or other estate in which such person has a substantial beneficial interest or as to which such person serves as trustee or in a similar fiduciary capacity, and (iii) any relative or spouse of such person, or any relative of such spouse, who has the same home as such person or who is a director or officer of the registrant or any of its parents or subsidiaries.

(d) Only those persons who are nominated in accordance with the procedures set forth in these Bylaws shall be eligible to serve as directors. Only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in these Bylaws, provided, however, that, once business has been properly brought before the meeting in accordance with Section 1.12, nothing in this Section 1.12(d) shall be deemed to preclude discussion by any stockholder of such business. If any information submitted pursuant to this Section 1.12 by any stockholder proposing a nominee(s) for election as a director at a meeting of stockholders is inaccurate in any material respect, such information shall be deemed not to have been provided in accordance with Section 1.12. Except as otherwise provided by law, the Certificate of Incorporation, or these Bylaws, the Chairperson of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made or proposed, as the case may be, in compliance with the procedures set forth in these Bylaws and, if he or she should determine that any proposed nomination or business is not in compliance with these Bylaws, he or she shall so declare to the meeting and any such nomination or business not properly brought before the meeting shall be disregarded or not be transacted.

(e) Notwithstanding the foregoing provisions of these Bylaws, a Noticing Stockholder also shall comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in these Bylaws; provided, however, that any references in these Bylaws to the Exchange Act or the rules thereunder are not intended to and shall not limit the requirements applicable to nominations or proposals as to any other business to be considered pursuant to Section 1.11 or Section 1.12 of these Bylaws.

(f) Nothing in these Bylaws shall be deemed to (i) affect any rights of (A) stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act or (B) the holders of any series or class of Preferred Stock, if any, if so provided under any applicable certificate of designation for such Preferred Stock or in the Certificate or Incorporation, or (ii) affect any rights of any holders of common stock pursuant to a stockholders' agreement with the Corporation existing on the date on which these Bylaws were adopted or impose any requirements, restrictions or limitations under Sections 1.11, 1.12 or 1.13 of these Bylaws unless expressly imposed by any such stockholders' agreement.

Section 1.13. Submission of Questionnaire, Representation and Agreement. To be eligible to be a nominee for election or reelection as a director of the Corporation by a Holder, a person must complete and deliver (in accordance with the time periods prescribed for delivery of notice under Section 1.12 of these Bylaws) to the Secretary at the principal executive offices of the Corporation a written questionnaire providing the information requested about the background and qualifications of such person and the background of any other person or entity on whose behalf the nomination is being made and a written representation and agreement (the questionnaire, representation, and agreement to be in the form provided by the Secretary upon written request) that such person:

(a) is not and will not become a party to:

(i) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how the person, if elected as a director of the Corporation, will act or vote on any issue or question (a "Voting Commitment") that has not been disclosed to the Corporation, or

(ii) any Voting Commitment that could limit or interfere with the person's ability to comply, if elected as a director of the Corporation, with the person's fiduciary duties under applicable law,

(b) is not and will not become a party to any agreement, arrangement or understanding with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director that has not been disclosed to the Corporation, and

(c) in the person's individual capacity and on behalf of any person or entity on whose behalf the nomination is being made, would be in compliance, if elected as a director of the Corporation, and will comply with all applicable publicly disclosed corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines of the Corporation.

Section 1.14. Inspectors of Elections. Preceding any meeting of the stockholders, the Board of Directors shall appoint one (1) or more persons to act as "inspectors" of elections, and may designate one (1) or more alternate inspectors. In the event no inspector or alternate is able to act, the Chairperson of such meeting shall appoint one (1) or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of the duties of an inspector, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspector shall:

(a) ascertain the number of shares outstanding and the voting power of each;

(b) determine the shares represented at a meeting, the authenticity, validity, and effect of proxies and ballots, and the existence of a quorum;

(c) specify the information relied upon to determine the validity of electronic transmissions in accordance with Section 1.09 of these Bylaws;

(d) count all votes and ballots;

(e) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors;

(f) certify his or her determination of the number of shares represented at the meeting, and his or her count of all votes and ballots;

(g) appoint or retain other persons or entities to assist in the performance of the duties of inspector;

(h) when determining the shares represented and the validity of proxies and ballots, be limited to an examination of the proxies, any envelopes submitted with those proxies, any information provided in accordance with Section 1.09 of these Bylaws, ballots and the regular books and records of the Corporation. The inspector may consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers or their nominees or a similar person

which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes than the stockholder holds of record. If the inspector considers other reliable information as outlined in this section, the inspector, at the time of his or her certification pursuant to paragraph (f) of this section, shall specify the precise information considered, the person or persons from whom the information was obtained, when this information was obtained, the means by which the information was obtained, and the basis for the inspector's belief that such information is accurate and reliable; and

(i) do any other acts that may be proper to conduct the election or vote with fairness to all stockholders.

Section 1.15. Opening and Closing of Polls. The date and time for the opening and the closing of the polls for each matter to be voted upon at a stockholder meeting shall be fixed by the Chairperson of the meeting and announced at the meeting. The inspector shall be prohibited from accepting any ballots, proxies or votes or any revocations thereof or changes thereto after the closing of the polls, unless the Delaware Court of Chancery upon application by a stockholder shall determine otherwise.

Section 1.16. List of Stockholders Entitled to Vote. The officer of the Corporation who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (10) days before every meeting of the stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting either (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the Corporation's principal executive office. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

Section 1.17. Stock Ledger. The stock ledger of the Corporation shall be the only evidence as to who are the stockholders entitled to examine the stock ledger, the list required by Section 1.16 of this Article I or the books of the Corporation, or to vote in person or by proxy at any meeting of the stockholders.

ARTICLE II

BOARD OF DIRECTORS

Section 2.01. General Powers. Except as may otherwise be provided by law, the Certificate of Incorporation or these Bylaws, the business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. In addition to the powers and authority expressly conferred upon it by applicable law, the Certificate of Incorporation or these Bylaws, the Board of Directors is hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Corporation, except as otherwise specifically required by law or as otherwise provided in the Certificate of Incorporation.

Section 2.02. Number, Election and Qualification. Subject to the terms of any one or more series or classes of Preferred Stock, the total number of directors constituting the Board of Directors shall be such number as may be fixed from time to time by resolution of at least a majority of the directors then in office. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires. At any meeting of stockholders at which directors are to be elected, directors shall be elected by the plurality vote of the votes cast by the holders of shares present in person or represented by proxy at the meeting and entitled to vote thereon. Election of directors need not be by written ballot. Directors need not be stockholders of the Corporation. To the extent set forth in the Certificate of Incorporation, the directors of the Corporation may be divided into classes with terms set forth therein.

Section 2.03. The Chairperson of the Board. The Board of Directors may elect a Chairperson of the Board from among the members of the Board. If elected, the Board of Directors shall designate the Chairperson of the Board as either a non-executive Chairperson of the Board or an executive Chairperson of the Board. The Chairperson of the Board shall not be deemed an officer of the Corporation, unless the Board of Directors shall determine otherwise. Subject to the control vested in the Board of Directors by statute, by the Certificate of Incorporation, or by these Bylaws, the Chairperson of the Board shall, if present, preside over all meetings of the stockholders and of the Board of Directors and shall have such other duties and powers as from time to time may be assigned to him or her by the Board of Directors, the Certificate of Incorporation or these Bylaws. References in these Bylaws to the "Chairperson of the Board" shall mean the non-executive Chairperson of the Board or executive Chairperson of the Board, as designated by the Board of Directors.

Section 2.04. Annual and Regular Meetings. The annual meeting of the Board of Directors for the purpose of electing officers and for the transaction of such other business as may come before the meeting shall be held after the annual meeting of the stockholders and may be held at such places within or without the State of Delaware and at such times as the Board may from time to time determine, and if so determined notice thereof need not be given. Notice of such annual meeting of the Board of Directors need not be given. The Board of Directors from time to time may by resolution provide for the holding of regular meetings and fix the place (which may be within or without the State of Delaware) and the date and hour of such meetings. Notice of regular meetings need not be given, provided, however, that if the Board of Directors shall fix or change

the time or place of any regular meeting, notice of such action shall be mailed promptly, or sent by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, telegraph, facsimile, electronic mail or other electronic means, to each director who shall not have been present at the meeting at which such action was taken, addressed to him or her at his or her usual place of business, or shall be delivered to him or her personally. Notice of such action need not be given to any director who attends the first regular meeting after such action is taken without protesting the lack of notice to him or her, prior to or at the commencement of such meeting, or to any director who submits a signed waiver of notice, whether before or after such meeting.

Section 2.05. Special Meetings; Notice. Special meetings of the Board of Directors for any purpose or purposes shall be held whenever called by the Chairperson of the Board, Chief Executive Officer, President or by the Board of Directors pursuant to the following sentence, at such place (within or without the State of Delaware), date and hour as may be specified in the respective notices or waivers of notice of such meetings. Special meetings of the Board of Directors also may be held whenever called pursuant to a resolution approved by a majority of the Board of Directors then in office. Notice shall be duly given to each director (a) in person or by telephone at least twenty-four (24) hours in advance of the meeting, (b) by sending written notice by reputable overnight courier, telecopy, facsimile or other means of electronic transmission, or delivering written notice by hand, to such director's last known business, home or means of electronic transmission address at least twenty-four (24) hours in advance of the meeting, or (c) by sending written notice by first-class mail to such director's last known business or to such other address as any director may request by notice to the Secretary at least seventy-two (72) hours in advance of the meeting. Notice of any special meeting need not be given to any director who attends such meeting without protesting the lack of notice to him or her, prior to or at the commencement of such meeting, or to any director who submits a signed waiver of notice, whether before or after such meeting, and any business may be transacted thereat.

Section 2.06. Quorum; Voting. At all meetings of the Board of Directors, the presence of at least a majority of the total number of directors shall constitute a quorum for the transaction of business. Except as otherwise required by law, the Certificate of Incorporation or these Bylaws, the vote of at least a majority of the directors present at any meeting at which a quorum is present shall be the act of the Board of Directors. A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

Section 2.07. Adjournment. A majority of the directors present, whether or not a quorum is present, may adjourn any meeting of the Board of Directors to another time or place. No notice need be given of any adjourned meeting unless the time and place of the adjourned meeting are not announced at the time of adjournment, in which case notice conforming to the requirements of Section 2.05 of these Bylaws shall be given to each Director.

Section 2.08. Action Without a Meeting. Any action required or permitted to be taken at any meeting of the Board of Directors, or any committee thereof, may be taken without a meeting if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing, writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 2.09. Regulations; Manner of Acting. To the extent consistent with applicable law, the Certificate of Incorporation and these Bylaws, the Board of Directors may adopt by resolution such rules and regulations for the conduct of meetings of the Board of Directors and for the management of the property, affairs and business of the Corporation as the Board of Directors may deem appropriate. The directors shall act only as a Board of Directors and the individual directors shall have no power in their individual capacities unless expressly authorized by the Board of Directors.

Section 2.10. Action by Telephonic Communications. Members of the Board of Directors, or any committee thereof, may participate in a meeting of the Board or committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear and communicate with each other, and participation in a meeting pursuant to this provision shall constitute presence in person at such meeting.

Section 2.11. Resignations. Any director may resign at any time by submitting an electronic transmission or by delivering a written notice of resignation, signed by such Director, to the Chairperson of the Board or the Secretary. Unless otherwise specified therein, such resignation shall take effect upon delivery.

Section 2.12. Removal of Directors. Subject to the terms of any one or more series or classes of Preferred Stock, any director or the entire Board of Directors may be removed from office at any time, but only for cause and only by the affirmative vote of the holders of at least a majority of the voting power of the Corporation's outstanding shares of stock entitled to vote generally in the election of directors, voting together as a single class. For purposes of this Article II, "cause" shall mean, with respect to any director, (i) the willful failure by such director to perform, or the gross negligence of such director in performing, the duties of a director, (ii) the engaging by such director in willful or serious misconduct that is injurious to the Corporation or (iii) the conviction of such director of, or the entering by such director of a plea of *nolo contendere* to, a crime that constitutes a felony.

Section 2.13. Vacancies and Newly Created Directorships. Subject to the terms of any one or more series or classes of Preferred Stock, any vacancies in the Board of Directors for any reason and any newly created directorships resulting by reason of any increase in the number of directors shall be filled only by the Board of Directors (and not by the stockholders), acting by a majority of the remaining directors then in office, even

if less than a quorum, or by a sole remaining director, and any directors so appointed shall hold office until the next election of the class of directors to which such directors have been appointed and until their successors are duly elected and qualified. No decrease in the number of directors shall shorten the term of any incumbent director.

Section 2.14. Compensation. The amount, if any, which each director shall be entitled to receive as compensation for such director's services, shall be fixed from time to time by resolution of the Board of Directors or any committee thereof or as an agreement between the Corporation and any Director. The directors may be reimbursed their out-of-pocket expenses, if any, of attendance at each meeting of the Board of Directors in accordance with the Corporation's policies in effect from time to time and may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary for service as director, payable in cash or securities. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation and reimbursement for service as committee members.

Section 2.15. Reliance on Accounts and Reports, Etc. A director, or a member of any committee designated by the Board of Directors, shall, in the performance of such director's or member's duties, be fully protected in relying in good faith upon the records of the Corporation and upon information, opinions, reports or statements presented to the Corporation by any of the Corporation's officers or employees, or committees designated by the Board of Directors, or by any other person as to the matters the director or the member reasonably believes are within such other person's professional or expert competence and who the director or member reasonably believes or determines has been selected with reasonable care by or on behalf of the Corporation.

Section 2.16. Director Elections by Holders of Preferred Stock. Notwithstanding the foregoing, whenever the holders of any one or more series or classes of Preferred Stock shall have the right, voting separately by series or class, to elect one or more directors at an annual or special meeting of stockholders, the election, filling of vacancies, removal of directors and other features of such one or more directorships shall be governed by the terms of such one or more series or classes of Preferred Stock to the extent permitted by law.

ARTICLE III

COMMITTEES

Section 3.01. Committees. The Board of Directors, by resolution adopted by the affirmative vote of a majority of directors then in office, may designate from among its members one (1) or more committees of the Board of Directors, each committee to consist of such number of directors as from time to time may be fixed by the Board of Directors. Any such committee shall serve at the pleasure of the Board of Directors. Each such committee shall have the powers and duties delegated to it by the Board of Directors, subject to the limitations set forth in applicable Delaware law. The Board of

Directors may appoint a Chairperson of any committee, who shall preside at meetings of any such committee. The Board of Directors may elect one (1) or more of its members as alternate members of any such committee who may take the place of any absent or disqualified member or members at any meeting of such committee, upon request of the Chairperson of the Board or the Chairperson of such committee.

Section 3.02. Powers. Each committee shall have and may exercise such powers of the Board of Directors as may be provided by resolution or resolutions of the Board of Directors or provided in charters or other organization documents of such committee approved by the Board of Directors. No committee shall have the power or authority: to approve or adopt, or recommend to the stockholders, any action or matter expressly required by the General Corporation Law of the State of Delaware to be submitted by the Board of Directors to the stockholders for approval; or to adopt, amend or repeal the Bylaws of the Corporation.

Section 3.03. Proceedings. Except as otherwise provided herein or required by law, each committee may fix its own rules of procedure and may meet at such place (within or without the State of Delaware), at such time and upon such notice, if any, as it shall determine from time to time. Each committee shall keep minutes of its proceedings and shall report such proceedings to the Board of Directors at the meeting of the Board next following any such proceedings.

Section 3.04. Quorum and Manner of Acting. Except as may be otherwise provided in the resolution creating such committee or in the rules of such committee, at all meetings of any committee, the presence of members (or alternate members) constituting a majority of the total authorized membership of such committee shall constitute a quorum for the transaction of business, except that, in the case of one-member committees, the presence of one member shall constitute a quorum and in the case of two-member committees, the presence of two members shall constitute a quorum. The act of the majority of the members present at any meeting at which a quorum is present shall be the act of such committee. Any action required or permitted to be taken at any meeting of any committee may be taken without a meeting, if all members of such committee shall consent to such action in writing or by electronic transmission and such writing, writings or electronic transmission or transmissions are filed with the minutes of the proceedings of the committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. The members of any committee shall act only as a committee, and the individual members of such committee shall have no power in their individual capacities unless expressly authorized by the Board of Directors.

Section 3.05. Action by Telephonic Communications. Unless otherwise provided by the Board of Directors, members of any committee may participate in a meeting of such committee by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear and communicate with each other, and participation in a meeting pursuant to this provision shall constitute presence in person at such meeting.

Section 3.06. Absent or Disqualified Members. In the absence or disqualification of a member of any committee, if no alternate member is present to act in his or her stead, the member or members thereof present at any meeting and not disqualified from voting, whether or not he, she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

Section 3.07. Resignations. Any member (and any alternate member) of any committee may resign at any time by submitting an electronic transmission or by delivering a written notice of resignation, signed by such member, to the Board of Directors or the Chairperson of the Board. Unless otherwise specified therein, such resignation shall take effect upon delivery.

Section 3.08. Removal. Any member (and any alternate member) of any committee may be removed at any time, either for or without cause, by resolution adopted by a majority of the total authorized number of directors.

Section 3.09. Vacancies. If any vacancy shall occur in any committee, by reason of disqualification, death, resignation, removal or otherwise, the remaining members (and any alternate members) shall continue to act, and any such vacancy may be filled by the Board of Directors.

ARTICLE IV

OFFICERS

Section 4.01. Chief Executive Officer. The Board of Directors shall select a Chief Executive Officer to serve at the pleasure of the Board of Directors. The Chief Executive Officer shall (a) supervise the implementation of policies adopted or approved by the Board of Directors, (b) exercise a general supervision and superintendence over all the business and affairs of the Corporation, (c) appoint and remove subordinate officers, agents and employees, except those appointed by the Board of Directors, and (d) possess such other powers and perform such other duties as may be assigned to him or her by these Bylaws, as may from time to time be assigned by the Board of Directors and as may be incident to the office of Chief Executive Officer of the Corporation. The Chief Executive Officer shall have general authority to execute bonds, deeds and contracts in the name of the Corporation and affix the corporate seal thereto, except where required or permitted by law to be otherwise signed and executed and except that the other officers of the Corporation may sign and execute documents when so authorized by these Bylaws, the Board of Directors or the Chief Executive Officer.

Section 4.02. Chief Financial Officer of the Corporation. The Board of Directors shall appoint a Chief Financial Officer of the Corporation to serve at the pleasure of the Board of Directors. The Chief Financial Officer of the Corporation shall (a) have the custody of the corporate funds and securities, except as otherwise provided by the Board of Directors, (b) keep full and accurate accounts of receipts and

disbursements in books belonging to the Corporation, (c) deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors, (d) disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and (e) render to the Chief Executive Officer and the Board of Directors, whenever they may require it, an account of all his or her transactions as Chief Financial Officer and of the financial condition of the Corporation.

Section 4.03. Treasurer and Assistant Treasurers. The Chief Executive Officer shall appoint a Treasurer of the Corporation and any number of Assistant Treasurers to serve at the pleasure of the Board of Directors. The Treasurer shall perform such duties and shall have such powers as may from time to time be assigned by the Board or the Chief Executive Officer or the Chief Financial Officer. In addition, the Treasurer shall perform such duties and have such powers as are incident to the office of treasurer, including without limitation the duty and power to keep and be responsible for all funds and securities of the Corporation, to deposit funds of the Corporation in depositories selected in accordance with these Bylaws, to disburse such funds as authorized by the Board or the Chief Executive Officer, to make proper accounts of such funds, and to render as required by the Board statements of all such transactions and of the financial condition of the Corporation.

The Assistant Treasurers shall perform such duties and possess such powers as the Board, the Chief Executive Officer or the Treasurer may from time to time prescribe. In the event of the absence, inability or refusal to act of the Treasurer, the Assistant Treasurer (or if there shall be more than one, the Assistant Treasurers in the order determined by the Board) shall perform the duties and exercise the powers of the Treasurer.

Section 4.04. Secretary of the Corporation. The Board of Directors shall appoint a Secretary of the Corporation to serve at the pleasure of the Board of Directors. The Secretary of the Corporation shall (a) keep minutes of all meetings of the stockholders and of the Board of Directors, (b) authenticate records of the Corporation, (c) give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors, and (d) in general, have such powers and perform such other duties as may be assigned to him or her by these Bylaws, as may from time to time be assigned to him or her by the Board of Directors or the Chief Executive Officer and as may be incident to the office of Secretary of the Corporation. If the Secretary shall be unable or shall refuse to cause to be given notice of all meetings of the stockholders and special meetings of the Board of Directors, and if there be no Assistant Secretary, then the Board of Directors may choose another officer to cause such notice to be given. The Secretary shall have custody of the seal of the Corporation and the Secretary or any Assistant Secretary, if there be one, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by the signature of the Secretary or by the signature of any such Assistant Secretary. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest to the affixing by such officer’s signature. The Secretary shall see that all books, reports, statements certificates and other documents and records required by law to be kept or filed are properly kept or filed, as the case may be.

Section 4.05. Other Officers Elected by Board Of Directors. At any meeting of the Board of Directors, the Board of Directors may elect a President (who may or may not be the Chief Executive Officer), a Chief Financial Officer, a Chief Operations Officer, Vice Presidents, Assistant Secretaries or such other officers of the Corporation as the Board of Directors may deem necessary, to serve at the pleasure of the Board of Directors. Other officers elected by the Board of Directors shall have such powers and perform such duties as may be assigned to such officers by or pursuant to authorization of the Board of Directors or by the Chief Executive Officer. Any number of offices may be held by the same person.

Section 4.06. Term of Office. Each officer shall hold office until his or her successor shall have been duly elected and shall have qualified or until his or her death or until he or she shall resign, but, subject to the requirements of the Certificate of Incorporation, any officer may be removed pursuant to the provisions set forth in Section 4.07.

Section 4.07. Removal and Resignation; Vacancies. Any officer may be removed for or without cause at any time by the Board of Directors. Any officer may resign at any time by delivering a written notice of resignation, signed by such officer, to the Board of Directors, the Chief Executive Officer or the Secretary. Unless otherwise specified therein, such resignation shall take effect upon delivery. Any vacancy occurring in any office of the Corporation by death, resignation, removal or otherwise, shall be filled by or pursuant to authorization of the Board of Directors.

Section 4.08. Authority and Duties of Officers. The officers of the Corporation shall have such authority and shall exercise such powers and perform such duties as may be specified in these Bylaws or pursuant to authorization of the Board of Directors, except that in any event each officer shall exercise such powers and perform such duties as may be required by law.

Section 4.09. Salaries of Officers. The salaries of all officers of the Corporation shall be fixed by the Board of Directors or any duly authorized committee thereof.

ARTICLE V

CAPITAL STOCK

Section 5.01. Certificates of Stock. The Board of Directors may authorize that some or all of the shares of any or all of the Corporation’s classes or series of stock be evidenced by a certificate or certificates of stock. The Board of Directors may also authorize the issue of some or all of the shares of any or all of the Corporation’s classes or series of stock without certificates. The rights and obligations of stockholders with the same class and/or series of stock shall be identical whether or not their shares are represented by certificates.

(a) Shares with Certificates. If the Board of Directors chooses to issue shares of stock evidenced by a certificate or certificates, each individual certificate shall include the following on its face: (i) the Corporation's name, (ii) the fact that the Corporation is organized under the laws of Delaware, (iii) the name of the person to whom the certificate is issued, (iv) the number of shares represented thereby, (v) the class of shares and the designation of the series, if any, which the certificate represents, and (vi) such other information as applicable law may require or as may be lawful. If the Corporation is authorized to issue different classes of shares or different series within a class, the designations, relative rights, preferences and limitations determined for each series (and the authority of the Board of Directors to determine variations for future series) shall be summarized on the front or back of each certificate. Alternatively, each certificate shall state on its front or back that the Corporation will furnish the stockholder this information in writing, without charge, upon request. Each certificate of stock issued by the Corporation shall be signed (either manually or in facsimile) by any two officers of the Corporation. If the person who signed a certificate no longer holds office when the certificate is issued, the certificate is nonetheless valid.

(b) Shares without Certificates. If the Board of Directors chooses to issue shares of stock without certificates, the Corporation, if required by the Exchange Act, shall, within a reasonable time after the issue or transfer of shares without certificates, send the stockholder a written notice containing the information required to be set forth or stated on certificates pursuant to the laws of the General Corporation Law of the State of Delaware. The Corporation may adopt a system of issuance, recordation and transfer of its shares of stock by electronic or other means not involving the issuance of certificates, provided the use of such system by the Corporation is permitted in accordance with applicable law.

Section 5.02. Signatures; Facsimile. All signatures on the certificate referred to in Section 5.01 of these Bylaws may be in facsimile, engraved or printed form, to the extent permitted by law. In case any officer, transfer agent or registrar who has signed, or whose facsimile, engraved or printed signature has been placed upon a certificate, shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

Section 5.03. Lost, Stolen or Destroyed Certificates. Except as provided in this Section 5.03, no new share certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the Corporation and cancelled at the same time. The Board of Directors may direct that a new certificate be issued in place of any certificate theretofore issued by the Corporation alleged to have been lost, stolen or destroyed, upon delivery to the Corporation of an affidavit of the owner or owners of such certificate, setting forth such allegation. The Corporation may require the owner of such lost, stolen or destroyed certificate, or his or her legal representative, to give the

Corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of any such new certificate.

Section 5.04. Transfer of Stock. Upon surrender to the Corporation or the transfer agent of the Corporation of a certificate for shares, duly endorsed or accompanied by appropriate evidence of succession, assignment or authority to transfer, the Corporation shall issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books. Within a reasonable time after the transfer of uncertificated stock, the Corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to the laws of the General Corporation Law of the State of Delaware. Subject to the provisions of the Certificate of Incorporation and these Bylaws, the Board of Directors may prescribe such additional rules and regulations as it may deem appropriate relating to the issue, transfer and registration of shares of the Corporation. No transfer of stock shall be valid against the Corporation for any purpose until it shall have been entered in the stock records of the Corporation by an entry showing the names of the persons from and to whom it was transferred.

Section 5.05. Record Date. In order to determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date on which the resolution fixing the record date is adopted by the Board of Directors, and which shall not be more than sixty (60) nor fewer than ten (10) days before the date of such meeting (or less than twenty (20) days if a merger or consolidation is to be acted upon at such a meeting). If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting, provided, however, that the Board of Directors may fix a new record date for the adjourned meeting. In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights of the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 5.06. Registered Stockholders. Prior to due surrender of a certificate for registration of transfer of any certificated shares, the Corporation may treat the registered owner as the person exclusively entitled to receive dividends and other distributions, to vote, to receive notice and otherwise to exercise all the rights and powers of the owner of

the shares represented by such certificate, and the Corporation shall not be bound to recognize any equitable or legal claim to or interest in such shares on the part of any other person, whether or not the Corporation shall have notice of such claim or interests. Whenever any transfer of shares shall be made for collateral security, and not absolutely, it shall be so expressed in the entry of the transfer if, when the certificates are presented to the Corporation for transfer or uncertificated shares are requested to be transferred, both the transferor and transferee request the Corporation to do so.

Section 5.07. Transfer Agent and Registrar. The Board of Directors may appoint one (1) or more transfer agents and one (1) or more registrars, and may require all certificates representing shares to bear the signature of any such transfer agents or registrars.

ARTICLE VI

INDEMNIFICATION

Section 6.01. Mandatory Indemnification and Advancement of Expenses. The Corporation shall indemnify and provide advancement to any Indemnitee to the fullest extent permitted by law, as such may be amended from time to time. The rights to indemnification and advancement conferred in this Section shall be contract rights. In furtherance of the foregoing indemnification and advancement obligations, and without limiting the generality thereof:

(a) Proceedings Other Than Proceedings by or in the Right of the Corporation. Any Indemnitee shall be entitled to the rights of indemnification and advancement provided in this Section 6.01(a) if, by reason of his or her Corporate Status (as defined below), Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding other than a Proceeding by or in the right of the Corporation. Pursuant to this Section 6.01(a), any Indemnitee shall be indemnified against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him or her, or on his or her behalf, in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation, and with respect to any criminal Proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful. The termination of any Proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that Indemnitee's conduct was unlawful.

(b) Proceedings by or in the Right of the Corporation. Any Indemnitee shall be entitled to the rights of indemnification and advancement provided in this Section 6.01(b) if, by reason of his or her Corporate Status, Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the

right of the Corporation. Pursuant to this Section 6.01(b), any Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee, or on Indemnitee's behalf, in connection with such Proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been finally adjudged to be liable to the Corporation unless and to the extent that the Court of Chancery of the State of Delaware or the court in which such Proceeding was brought shall determine that such indemnification may be made.

(c) Other Sources. The Corporation hereby acknowledges that Indemnitees may have certain rights to indemnification, advancement of expenses and/or insurance provided by sources other than the Corporation ("Third Party Indemnitors"). The Corporation hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to the Indemnitees are primary and any obligation of the Third Party Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by the Indemnitees are secondary), (ii) that it shall be required to advance the full amount of Expenses incurred by the Indemnitees and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this paragraph and the Bylaws of the Corporation from time to time (or any other agreement between the Corporation and the Indemnitees), without regard to any rights the Indemnitees may have against the Third Party Indemnitors, and (iii) that it irrevocably waives, relinquishes and releases the Third Party Indemnitors from any and all claims against the Third Party Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Corporation further agrees that no advancement or payment by the Third Party Indemnitors on behalf of the Indemnitees with respect to any claim for which the Indemnitees have sought indemnification from the Corporation shall affect the foregoing and the Third Party Indemnitors shall have a right of contribution and/or to be subrogated to the extent of such advancement or payment to all of the rights of recovery of the Indemnitees against the Corporation. The Corporation and the Indemnitees agree that the Third Party Indemnitors are express third party beneficiaries of the terms of this paragraph.

Section 6.02. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provision of this Article VI, to the extent that any Indemnitee is, by reason of his or her Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, he or she shall be indemnified to the maximum extent permitted by law, as such may be amended from time to time, against all Expenses actually and reasonably incurred by him or her or on his or her behalf in connection therewith. If such Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Corporation shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or her or on his or her behalf in

connection with each successfully resolved claim, issue or matter. For purposes of this Section 6.02 and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

Section 6.03. Employees and Agents. This Section VI shall not limit the right of the Corporation, to the extent and in the manner permitted by law, to indemnify and to advance expenses to persons other than Indemnitees when and as authorized by appropriate corporate action. Without limiting the generality of the foregoing, the Corporation may, to the extent authorized from time to time by the Board of Directors, provide rights to indemnification and advancement of expenses to employees and agents of the Corporation.

Section 6.04. Advancement of Expenses. Notwithstanding any other provision of this Article VI, the Corporation shall advance all Expenses incurred by or on behalf of any Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within thirty (30) days after the receipt by the Corporation of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding, and regardless of such Indemnitee's ability to repay any such amounts in the event of an ultimate determination that Indemnitee is not entitled thereto. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 6.04 shall be unsecured and interest free.

Section 6.05. Non-Exclusivity. The rights to indemnification and to the payment of Expenses incurred in defending a Proceeding in advance of the final disposition of such Proceeding conferred in this Article VI shall not be exclusive of any other rights which any person may have or hereafter acquire under applicable law, the Certificate of Incorporation, these Bylaws, any agreement, vote of stockholders, resolution of directors or otherwise. The assertion or employment of any right or remedy in this Article VI, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

Section 6.06. Insurance. The Corporation shall have the power to purchase and maintain insurance, at its expense, to the fullest extent permitted by law, as such may be amended from time to time. Without limiting the generality of the foregoing, the Corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was or has agreed to become a director, officer, employee or agent of the Corporation, or who is serving, was serving, or has agreed to serve at the request of the Corporation as a director, officer, trustee, general partner, managing member, fiduciary, employee or agent of any other Enterprise, against any liability asserted against him or her and incurred by him or her or on his or her behalf in such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power to indemnify him or her against such liability.

Section 6.07. Exception to Rights of Indemnification and Advancement. Notwithstanding any provision in this Article VI, the Corporation shall not be obligated by this Article VI to make any indemnity or advancement in connection with any claim made against an Indemnitee:

(a) subject to Section 6.01(c), for which payment has actually been made to or on behalf of such Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision;

(b) for an accounting of profits made from the purchase and sale (or sale and purchase) by such Indemnitee of securities of the Corporation within the meaning of Section 16(b) of the Exchange Act or similar provisions of state statutory law or common law;

(c) for reimbursement to the Corporation of any bonus or other incentive-based or equity based compensation or of any profits realized by Indemnitee from the sale of securities of the Corporation in each case as required under the Exchange Act; or

(d) in connection with any Proceeding (or any part of any Proceeding) initiated by such Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by such Indemnitee against the Corporation or its directors, officers, employees or other Indemnitees, unless (i) the Corporation has joined in or, prior to such Proceeding's initiation, the Board of Directors authorized such Proceeding (or any part of such Proceeding), (ii) the Corporation provides the indemnification or advancement, in its sole discretion, pursuant to the powers vested in the Corporation under applicable law, or (iii) the Proceeding is one to enforce such Indemnitee's rights under this Article VI, Article VII of the Certificate of Incorporation or any other indemnification, advancement or exculpation rights to which Indemnitee may at any time be entitled under applicable law or any agreement.

Section 6.08. Definitions. For purposes of this Article VI:

(a) "Corporate Status" describes the status of an individual who is or was or has agreed to become a director or officer of the Corporation or who is serving, was serving, or has agreed to serve at the request of the Corporation as a director, officer, trustee, general partner, managing member, fiduciary, employee or agent of any other Enterprise.

(b) "Enterprise" shall mean the Corporation and any other corporation, constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger to which the Corporation (or any of their wholly owned

subsidiaries) is a party, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise, of which Indemnitee is or was serving at the request of the Corporation as a director, officer, trustee, general partner, managing member, fiduciary, employee or agent.

(c) "Expenses" shall include all direct and indirect costs, fees and expenses of any type or nature whatsoever, including, without limitation, all attorneys' fees and costs, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, fees of private investigators and professional advisors, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, fax transmission charges, secretarial services, any federal, state, local or foreign taxes imposed on Indemnitee as a result of the actual or deemed receipt of any payments under this Article VI, ERISA excise taxes and penalties, and all other disbursements, obligations or expenses in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, settlement or appeal of, or otherwise participating in, a Proceeding, including, without limitation, reasonable compensation for time spent by the Indemnitee for which he or she is not otherwise compensated by the Corporation or any third party. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the principal, premium, security for, and other costs relating to any cost bond, supersedeas bond, or other appeal bond or its equivalent.

(d) "Indemnitee" means any current or former director or officer of the Corporation; and

(e) "Proceeding" shall include any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by or in the right of the Corporation or otherwise and whether of a civil (including intentional or unintentional tort claims), criminal, administrative or investigative (formal or informal) nature, including appeal therefrom, in which Indemnitee was, is, will or might be involved as a party, potential party, non-party witness or otherwise by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Corporation, by reason of any action (or failure to act) taken by him or of any action (or failure to act) on his part while acting as a director, officer, employee or agent of the Corporation, or by reason of the fact that Indemnitee is or was serving at the request of the Corporation as a director, officer, trustee, general partner, managing member, fiduciary, employee or agent of any other Enterprise, in each case whether or not serving in such capacity at the time any liability or expense is incurred for which indemnification, reimbursement, or advancement of expenses can be provided under this Article VI. If the Indemnitee believes in good faith that a given situation may lead to or culminate in the institution of a Proceeding, this shall be considered a Proceeding under this Article VI.

Section 6.09. Right of Indemnitee to Bring Suit. If a claim under this Article VI is not paid in full by the Corporation within thirty (30) days after a written claim has been received by the Corporation, Indemnitee may at any time thereafter bring suit against the Corporation in the Court of Chancery of the State of Delaware or any other court of competent jurisdiction in the State of Delaware to recover the unpaid amount of the claim. In any such action, the Corporation shall have the burden of proving that Indemnitee was not entitled to the requested indemnification, advancement or payment of Expenses. It shall be a defense to any such action (other than an action brought to enforce a claim for Expenses incurred in defending any proceeding in advance of its final disposition where the required undertaking, if any is required, has been tendered to the Corporation) that Indemnitee has not met the standards of conduct which make it permissible under these Bylaws, the Certificate of Incorporation or the DGCL for the Corporation to indemnify Indemnitee for the amount claimed. Neither the failure of the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such action that indemnification or advancement is proper in the circumstances because Indemnitee has met the applicable standard of conduct set forth in these Bylaws, the Certificate of Incorporation or the DGCL, nor an actual determination by the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met any applicable standard of conduct. If successful, in whole or in part, Indemnitee shall also be entitled to be paid the Expenses of prosecuting such action.

Section 6.10. Survival of Indemnification and Advancement of Expenses. The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VI shall continue as to a person who has ceased to be a director or officer and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 6.11. Change in Rights. Neither any amendment nor repeal of this Article VI, nor the adoption of any provision in these Bylaws inconsistent with this Article VI, shall eliminate or reduce the effect of this Article VI in respect of any acts or omissions occurring prior to such alteration, amendment, addition to, repeal or adoption.

ARTICLE VII

GENERAL PROVISIONS

Section 7.01. Dividends. Subject to any applicable provisions of law or the Certificate of Incorporation, dividends upon the shares of capital stock of the Corporation may be declared by the Board of Directors at any regular or special meeting of the Board of Directors and any such dividend may be paid in cash, property or shares of the Corporation’s capital stock. A member of the Board of Directors, or a member of any committee designated by the Board of Directors, shall be fully protected in relying in good faith upon the records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of its officers or employees, or committees of the Board of Directors, or by any other person as to matters the director reasonably believes are within such other person’s professional or expert competence and

who the director or member reasonably believes or determines has been selected with reasonable care by or on behalf of the Corporation, as to the value and amount of the assets, liabilities and/or net profits of the Corporation, or any other facts pertinent to the existence and amount of surplus or other funds from which dividends might properly be declared and paid.

Section 7.02. Execution of Instruments. The Board of Directors may authorize, or provide for the authorization of, officers, employees or agents to enter into any contract or execute and deliver any instrument in the name and on behalf of the Corporation. Any such authorization must be in writing or by electronic transmission and may be general or limited to specific contracts or instruments.

Section 7.03. Voting as Stockholder. Unless otherwise determined by resolution of the Board of Directors, the Chief Executive Officer, the President, if any, the Chief Financial Officer, any Executive Vice President or any other person authorized by the Board of Directors shall have full power and authority on behalf of the Corporation to attend any meeting of stockholders of any corporation in which the Corporation may hold stock, and to act, vote (or execute proxies to vote) and exercise in person or by proxy all other rights, powers and privileges incident to the ownership of such stock. Such officers acting on behalf of the Corporation shall have full power and authority to execute any instrument expressing consent to or dissent from any action of any such corporation without a meeting. The Board of Directors may by resolution from time to time confer such power and authority upon any other person or persons.

Section 7.04. Corporate Seal. The corporate seal shall be in such form as the Board of Directors shall prescribe. The Corporation may use the corporate seal by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

Section 7.05. Fiscal Year. The fiscal year of the Corporation shall be fixed, and shall be subject to change, by the Board of Directors.

Section 7.06. Notices. If mailed, notice to a stockholder shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the General Corporation Law of the State of Delaware. An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the Corporation that the notice has been given in writing or by a form of electronic transmission shall, in the absence of fraud, be *prima facie* evidence of the facts stated therein.

Section 7.07. Form of Records. Any records maintained by the Corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be kept on or by means of, or be in the form of, any information storage

device or method, provided that the records so kept can be converted into clearly legible paper form within a reasonable time. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to any provision of the General Corporation Law of the State of Delaware.

Section 7.08. Time Periods. In applying any provision of these Bylaws which requires that an act be done or not be done a specified number of days prior to an event or that an act be done during a period of a specified number of days prior to an event, calendar days shall be used, the day of the doing of the act shall be excluded and the day of the event shall be included.

Section 7.09. Severability. If any provision (or any part thereof) of these Bylaws shall be held to be invalid, illegal or unenforceable as applied to any circumstance for any reason whatsoever: (i) the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of these Bylaws (including, without limitation, each portion of any section of these Bylaws containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and (ii) to the fullest extent possible, the provisions of these Bylaws (including, without limitation, each such containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to permit the Corporation to protect its directors, officers, employees and agents from personal liability in respect of their good faith service or for the benefit of the Corporation to the fullest extent permitted by law.

Section 7.10. Forum. Unless the Corporation consents in writing in advance to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (A) any derivative action or proceeding brought on behalf of the Corporation, (B) any action asserting a claim of breach of a fiduciary duty owed by, or any wrongdoing by, any director, officer or employee of the Corporation to the Corporation or the Corporation's stockholders, (C) any action asserting a claim arising pursuant to any provision of the DGCL, the Certificate of Incorporation (including as it may be amended from time to time), or these Bylaws, (D) any action to interpret, apply, enforce or determine the validity of the Certificate of Incorporation or these Bylaws, or (E) any action asserting a claim governed by the internal affairs doctrine, except for, as to each of (A) through (E) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the personal jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten (10) days following such determination).

ARTICLE VIII

AMENDMENT OF BYLAWS

Section 8.01. By the Board. Subject to the provisions of the Certificate of Incorporation, the Board of Directors may make, alter, amend, add to or repeal any and all of these Bylaws by resolution adopted by a majority of the directors then in office or by the affirmative vote of a majority of directors present at any regular or special meeting of the Board at which a quorum is present.

Section 8.02. By the Stockholders. Subject to the provisions of the Certificate of Incorporation, the affirmative vote of the holders of at least 66 2/3% of the voting power of the Corporation's then outstanding shares entitled to vote generally in the election of directors, voting together as a single class, shall be required for the stockholders to make, alter, amend, add to or repeal any or all Bylaws of the Corporation or to adopt any provision inconsistent therewith.

ARTICLE IX

CONSTRUCTION

In the event of any conflict between the provisions of these Bylaws as in effect from time to time and the provisions of the Certificate of Incorporation of the Corporation as in effect from time to time, the provisions of such Certificate of Incorporation shall be controlling. Unless the context requires otherwise, the general provisions, rules of construction and definitions in the DGCL shall govern the construction of these Bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term "person" includes corporations, other business entities, and natural persons.

NCS MULTISTAGE HOLDINGS, INC.

REGISTRATION RIGHTS AGREEMENT

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REGISTRATION RIGHTS AGREEMENT

REGISTRATION RIGHTS AGREEMENT (the "Agreement"), dated as of [•], 2017, by and among NCS Multistage Holdings, Inc., a Delaware corporation (together with its successors and assigns, the "Issuer"), the Advent Stockholders (as hereinafter defined) and the Management Holders (as hereinafter defined) and the other signatories hereto who execute an agreement to bound to this Agreement in the form of Exhibit A hereto from time to time.

WHEREAS, the Holders (as defined below) own Registrable Securities (as defined below); and

WHEREAS, the parties desire to set forth certain registration rights applicable to the Registrable Securities.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises, covenants and agreements of the parties hereto, and for other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01 Definitions. As used in this Agreement, the following terms shall have the following meanings:

"Advent Stockholders" means Advent-NCS Acquisition Limited Partnership, a Delaware limited partnership, and its Permitted Transferees.

"Affiliate" means, with respect to any Person, any other Person who, directly or indirectly, controls such first Person or is controlled by said Person or is under common control with said Person, where "control" means the power and ability to direct, directly or indirectly, or share equally in or cause the direction of, the management and/or policies of a Person, whether through ownership of voting shares or other equivalent interests of the controlled Person, by contract (including proxy) or otherwise; provided, that no Holder shall be deemed an Affiliate of any other Holder by reason of an investment in, or holding Shares of, the Issuer.

"Agreement" has the meaning set forth in the Preamble.

"Board" means the Board of Directors of the Issuer.

"Business Day" means any day except a Saturday, Sunday or other day on which commercial banks in New York City, New York are authorized or required by applicable law to close.

"Commission" means the United States Securities and Exchange Commission.

"Damages" has the meaning set forth in Section 3.01(a).

"Demand Maximum Offering Size" has the meaning set forth in Section 2.01(d).

"Demand Registration" has the meaning set forth in Section 2.01(a).

"Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time.

"FINRA" means the Financial Industry Regulatory Authority, Inc.

"Governmental Authority" means any federal, state, local or foreign governmental authority, department, commission, board, bureau, agency, court, instrumentality or judicial or regulatory body or entity.

"Holder" means any Advent Stockholder or Management Holder or any other holder of Registrable Securities who is a party hereto.

"Initial Public Offering" means any initial underwritten sale of Shares of the Issuer, any of its Subsidiaries or any Person that holds, directly or indirectly, all of the Shares or assets of the Issuer, pursuant to an effective Registration Statement under the Securities Act filed with the Commission on Form S-1 (or a successor form) after which sale such Shares are (a) listed on a national securities exchange or authorized to be quoted on an inter-dealer quotation system of a registered national securities association and (b) registered under the Exchange Act.

"Indemnified Party" shall mean (i) each officer and director of the Issuer, and (ii) each Holder and their respective Affiliates, officers, managers, directors, employees, shareholders, partners, members, advisors or sub-advisors.

"Indemnifying Party" has the meaning set forth in Section 3.01(c).

"Inspectors" has the meaning set forth in Section 2.05(g).

"Issuer" has the meaning set forth in the Preamble.

"Management Holder" means (i) the Persons set forth on the signature pages hereto as "Management Holders" and their Permitted Transferees and (ii) any Holder who is, or was, at any time an employee, officer, manager, director or consultant of, or other Person rendering services to, the Issuer or any of its Subsidiaries and is designated a Management Holder by the Board and becomes a party hereto and their Permitted Transferees.

"Participating Holder" shall mean any Holder holding Registrable Securities covered by a Registration Statement.

"Permitted Transferee" means, (i) with respect to any Advent Stockholder, (x) any Affiliate of such Advent Stockholder or (y) any passive Person, vehicle, account or fund that is managed, sponsored or advised by, pursuant to the terms of the Investment Advisers Act of 1940, as amended, such Advent Stockholder or any Affiliate thereof, so long as the decision-making control with respect to such interests after such Transfer to such passive Person, vehicle, account or fund remains with such Advent Stockholder or any Affiliate thereof, (ii) with respect to any Holder who is an individual, (A) in the event of such Holder's death, such Holder's heirs, executors, administrators, testamentary trustees, legatees or beneficiaries, (B) a trust, the beneficiaries of which include only such Holder and the spouse and lineal descendants of such Holder and pursuant to which the Holder retains all of the voting interest in the Issuer, (C) a charitable trust pursuant to which the Holder retains all of the voting interests in the Issuer, or (D) a closely held company with respect to which the Holder together with the Holder's immediate family holds 100% of the beneficial interests, and (iii) with respect to any other Holder, an Affiliate of such Holder.

"Person" means any individual, corporation, limited liability company, partnership, association, trust or other entity or organization, including a Governmental Authority and, where the context so permits, the legal representatives, successors in interest and permitted assigns of such Person.

"Piggyback Maximum Offering Size" has the meaning set forth in Section 2.02(b).

"Piggyback Registration" has the meaning set forth in Section 2.02(a).

"Public Offering" means a public offering and sale of Shares for cash pursuant to an effective registration statement under the Securities Act.

"Records" has the meaning set forth in Section 2.05(g).

"Registrable Securities" shall mean, at any time, any Shares (other than non-participating, non-convertible preferred stock) of the Issuer held by any Holder and any Shares issuable upon the exchange of shares of common stock of NCS Multistage Inc.; provided, that Registrable Securities shall not include any shares (i) the sale of which has been registered pursuant to the Securities Act and which shares have been sold pursuant to such registration, (ii) which have been sold or are eligible to be sold or distributed pursuant to Rule 144 or Rule 145 without limitation as to time and volume, or (iii) which have been registered for resale pursuant to an effective Registration Statement on a Form S-8 (or any successor or similar form).

"Registration Expenses" means any and all expenses incident to the performance of or compliance with any registration or marketing of securities, including all (i) registration and filing fees, FINRA fees and all other fees and expenses payable in connection with the listing of securities on any securities exchange or automated interdealer quotation system, (ii) fees and expenses of compliance with any securities or "blue sky" laws (including reasonable fees and disbursements of counsel in connection with "blue sky" qualifications of the securities registered), (iii) expenses in connection with the preparation, printing, mailing and delivery of any Registration Statements, prospectuses and other documents in connection therewith and any

amendments or supplements thereto, (iv) security engraving and printing expenses, (v) internal expenses of the Issuer (including all salaries and expenses of its officers and employees performing legal or accounting duties), (vi) fees and disbursements of counsel for the Issuer and customary fees and expenses for independent certified public accountants retained by the Issuer (including the expenses relating to any comfort letters or costs associated with the delivery by independent certified public accountants of any comfort letters to be provided pursuant to Section 2.05(h) hereof), (vii) fees and expenses of any special experts retained by the Issuer in connection with such registration, (viii) reasonable fees and expenses of any counsel to the Advent Stockholders, (ix) fees and expenses in connection with any review of the underwriting arrangements or other terms of the offering, and all fees and expenses of any "qualified independent underwriter" or other independent appraiser participating in any offering, including the fees and expenses of any counsel thereto, (x) fees and disbursements of underwriters customarily paid by issuers or sellers of securities, but excluding any underwriting fees, discounts and commissions attributable to the sale of Registrable Securities, (xi) costs of printing and producing any agreements among underwriters, underwriting agreements, any "blue sky" or legal investment memoranda and any selling agreements and other documents in connection with the offering, sale or delivery of the Registrable Securities, (xii) transfer agents' and registrars' fees and expenses and the fees and expenses of any other agent or trustee appointed in connection with such offering, (xiii) expenses relating to any analyst or investor presentations or any "road shows" undertaken in connection with the registration, marketing or selling of the Registrable Securities, (xiv) fees and expenses payable in connection with any ratings of the Registrable Securities, including expenses relating to any presentations to rating agencies, and (xv) all other costs and expenses incurred by the Issuer in connection with their compliance with this Agreement.

"Registration Statement" shall mean any registration statement of the Issuer, under the Securities Act which permits the Public Offering of any of the Registrable Securities pursuant to the provisions of this Agreement, including the prospectus, amendments and supplements to such registration statement, including post-effective amendments, all exhibits and all material incorporated by reference or deemed to be incorporated by reference in such registration statement.

"Requesting Stockholders" has the meaning set forth in Section 2.01(a).

"Securities Act" means the Securities Act of 1933, as amended from time to time, and the rules and regulations promulgated thereunder.

"Shares" means the shares of common stock, par value $0.01 per share, of the Issuer and any securities into which such shares of common stock shall have been changed or any securities resulting from any reclassification or recapitalization of such shares of common stock.

"Shelf Registration" has the meaning set forth in Section 2.03(a).

"Shelf Request" has the meaning set forth in Section 2.03(a).

"Subsidiary" means, with respect to any specified Person, any other Person in which such specified Person, directly or indirectly through one or more Affiliates or otherwise, beneficially owns at least twenty-five percent (25%) of the ownership interest (determined by equity or economic interests) in, or the voting control of, such other Person.

"Transfer" means, with respect to any Shares, every absolute or conditional method of transferring a legal or equitable, record or beneficial, direct or indirect ownership (including the granting of an option or other right, or through the transfer of capital stock of any Person that holds, or controls any Person that holds an interest) of a Holder's interest in the Issuer, or a part thereof, whether voluntarily, involuntarily, or by operation of law (including a change in beneficiaries or trustees of a trust) and including directly or indirectly (including through one or more transfers) selling, exchanging, assigning, transferring, conveying, giving away, pledging, mortgaging, or otherwise create, incur or assume any encumbrance with respect to, such interest; provided, however, that a Transfer shall not include any direct or indirect transfer (including through one or more transfers), sale, exchange, assignment, conveyance, gift, pledge, mortgage or other disposition of a limited partnership interest in Advent-NCS Acquisition Limited Partnership, whether voluntarily, involuntarily or by operation of law.

"Underwritten Shelf Take-Down" has the meaning set forth in Section 2.03(d).

"Withdrawing Holders" has the meaning set forth in Section 2.04(c).

Section 1.02 General Interpretive Principles. The name assigned to this Agreement and the section captions used herein are for convenience of reference only and shall not be construed to affect the meaning, construction or effect hereof. Unless otherwise specified, the terms "hereof," "herein" and similar terms refer to this Agreement as a whole, and references herein to Articles or Sections refer to Articles or Sections of this Agreement. For purposes of this Agreement, the words, "include," "includes" and "including," when used herein, shall be deemed in each case to be followed by the words "without limitation." The terms "dollars" and "$" shall mean United States dollars. Except as otherwise set forth herein, Shares underlying unexercised options that have been issued by the Company shall not be deemed "outstanding" for any purposes in this Agreement. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. If an ambiguity or question of intent or interpretation arises, this Agreement will be construed as if drafted jointly by the parties and no presumption or burden of proof will arise favoring or disfavoring any party because of the authorship of any provision of this Agreement.

ARTICLE II

REGISTRATION RIGHTS

Section 2.01 Demand Registration.

(a) Registration Request. At any time after the six (6) month anniversary of the consummation by the Issuer of the Initial Public Offering, the holders of a majority in interest of the Registrable Securities held by the Advent Stockholders (the "Requesting Stockholders") may request in writing that the Issuer effect the registration under the Securities Act of all or any

portion of their Registrable Securities, specifying the intended method of disposition thereof (each such request, a "Demand Registration"), and the Issuer shall use its reasonable best efforts to effect, as expeditiously as possible, the registration under the Securities Act of all Registrable Securities for which such Requesting Stockholders have requested registration under this Section 2.01(a); provided, that the Issuer shall not be obligated to effect a Demand Registration unless the aggregate gross proceeds expected to be received from the sale of the Registrable Securities requested to be included by such Requesting Stockholders in such Demand Registration are at least $25,000,000.

(b) Effective Registration. At any time prior to the effective date of the Registration Statement relating to such Demand Registration, the Requesting Stockholders may revoke their registration request without liability to such Requesting Stockholders, by providing a notice to the Issuer revoking such request.

(c) Registration Expenses. The Issuer shall be liable for and pay all Registration Expenses in connection with each Demand Registration, regardless of whether such registration is effected; provided, that the Participating Holders holding Registrable Securities shall each pay their *pro rata* portion (based on the number of shares each Participating Holder is selling) of all underwriting discounts, selling commissions and stock transfer taxes applicable to the sale of Registrable Securities.

(d) Reduction of Public Offering. Subject to Section 2.02(b), if a Demand Registration involves a public offering and the managing underwriter advises the Issuer and the Requesting Stockholders that, in its view, the number of Registrable Securities that the Requesting Stockholders, the Holders (pursuant to Section 2.02) and the Issuer propose to include in such registration exceeds the largest number of Registrable Securities that can be sold without having an adverse effect on such offering, including the price at which such Registrable Securities can be sold (the "Demand Maximum Offering Size"), the Issuer shall only include in such registration Registrable Securities of the Requesting Stockholders and the other Participating Holders up to the Demand Maximum Offering Size (with the number of Registrable Securities of the Requesting Stockholders and the other Participating Holders included in such registration reduced *pro rata* based on their relative number of Registrable Securities requested to be included in the Demand Registration).

Section 2.02 Piggyback Registration.

(a) Participation. If the Issuer proposes to register any Shares under the Securities Act (whether for itself or otherwise in connection with a sale of securities by another Person (including a Shelf Registration or a Demand Registration by any Advent Stockholders), but other than (i) a registration on a Form S-4 (or any successor or similar form) in connection with a direct or indirect acquisition by the Issuer of another Person, or (ii) a registration on a Form S-8 (or any successor or similar form), the Issuer shall at each such time give prompt written notice at least fifteen (15) days prior to the anticipated filing date of the Registration Statement relating to such registration to each Holder holding Registrable Securities hereunder, which notice shall set forth such Holder's rights under this Section 2.02 and shall offer such Holder the opportunity to include in such Registration Statement all or any portion of the Registrable Securities held by such Holder (a "Piggyback Registration"), subject to the restrictions set forth herein. Notwithstanding anything herein to the contrary, neither the Management Holders nor any other non-Advent Stockholder Holders shall have the piggyback rights in this Section 2.02 in the case of a non-marketed block trade by any Advent Stockholder.

(i) Upon any such request of any such Holder made within fifteen (15) days after the receipt of notice from the Issuer (which request shall specify the number of Registrable Securities intended to be registered by such Holder), the Issuer shall use its reasonable best efforts to effect the registration under the Securities Act of all such Registrable Securities that the Issuer has been so requested to register by all such Holders; provided, that if such registration involves a Public Offering, all such Holders requesting to be included in the Issuer's registration must sell their Registrable Securities to the underwriters selected as provided in Section 2.05(f) on the same terms and conditions as apply to the Issuer or any other selling equity holders; provided, however, that no such Person shall be required to make any representations or warranties, or provide any indemnity, in connection with any such registration other than representations and warranties (or indemnities with respect thereto) as to (i) such Person's ownership of his, her or its Registrable Securities to be transferred free and clear of all liens, claims, and encumbrances, (ii) such Person's power and authority to effect such transfer, (iii) such matters pertaining to compliance with securities laws by such Person as may be reasonably requested and (iv) such information furnished in writing to the Issuer by such Person or on behalf of such Person expressly for use in the Registration Statement; provided, further, however, that the obligation of such Person to indemnify pursuant to any such underwriting arrangements shall be several, not joint and several, among such Persons selling Registrable Securities, and the liability of each such Person will be in proportion thereto; and provided, further, that such liability will be limited to the net proceeds received by such Person from the sale of his, her or its Registrable Securities pursuant to such registration.

(ii) If, at any time after giving notice of its intention to register any Registrable Securities pursuant to this Section 2.02(a) and prior to the effective date of the Registration Statement filed in connection with such registration, the Issuer or the Requesting Stockholders, as applicable, shall decide for any reason not to register such securities, the Issuer shall give notice to all such Holders of Registrable Securities and, thereupon, shall be relieved of its obligation to register any Registrable Securities in connection with such registration. No registration effected under this Section 2.02 shall relieve the Issuer of its obligations to effect a Demand Registration to the extent required by Section 2.01. The Issuer shall be liable for and pay all Registration Expenses in connection with each Piggyback Registration, regardless of whether such registration is effected.

(b) Reduction of Piggyback Offering. If a Piggyback Registration involves a Public Offering and the managing underwriter advises the Issuer that, in its view, the number of Registrable Securities that the Issuer and all selling Holders propose to include in such registration exceeds the largest number of Registrable Securities that can be sold without having an adverse effect on such offering, including the price at which such Registrable Securities can be sold (the "Piggyback Maximum Offering Size"), the Issuer shall include in such registration, in the following priority, up to the Piggyback Maximum Offering Size:

(i) first, such number of Registrable Securities proposed to be registered for the account of the Issuer, if any, as would not cause the offering to exceed the Piggyback Maximum Offering Size; and

(ii) second, all Registrable Securities requested to be included in such registration by any Holders pursuant to Section 2.01 and this Section 2.02 (the Registrable Securities in this clause (ii) allocated, if necessary for the offering not to exceed the Piggyback Maximum Offering Size, *pro rata* among such Holders based on their relative number of Registrable Securities requested to be included in the Piggyback Registration and, if applicable, Demand Registration); provided, however, that notwithstanding the foregoing, in no event shall the number of Registrable Securities included in the offering be reduced below thirty percent (30%) of the total number of securities included in such offering, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other Holders' securities are included in such offering.

Section 2.03 Shelf Registration.

(a) Shelf Registration Request. As soon as reasonably practicable after the Initial Public Offering, the Issuer will use its reasonable best efforts, consistent with the terms of this Agreement, to qualify for and remain eligible to use Form S-3 registration or a similar short-form registration. At any time after the Issuer becomes eligible to use Form S-3 registration or a similar short-form registration, upon receipt of a written request (the "Shelf Request") from holders of a majority in interest of the Registrable Securities held by the Advent Stockholders that the Issuer file a "shelf" Registration Statement pursuant to Rule 415 under the Securities Act (the "Shelf Registration") on Form S-3 (or any successor form to Form S-3, or any similar short form Registration Statement), covering the resale of Registrable Securities, the Issuer shall (i) consistent with the terms of this Agreement, cause the Shelf Registration to be filed with the Commission as soon as practicable (but in no event later than twenty (20) days following its receipt of the Shelf Request) and (ii) use its reasonable best efforts, consistent with the terms of this Agreement, to cause such Shelf Registration to be declared effective by the Commission as soon as possible.

(b) Effectiveness. The Issuer shall use reasonable best efforts to maintain in effect, supplement and amend, if necessary the Shelf Registration, as required by the instructions applicable to such registration form or by the Securities Act or as reasonably requested by such Advent Stockholders and will furnish to the holders of Registrable Securities copies of any supplement or amendment to such Shelf Registration after the close of business at least one (1) Business Day prior to such supplement, amendment or document being used and/or filed with the SEC.

(i) If at any time the Shelf Registration ceases to be effective, then the Issuer shall use its reasonable best efforts to file and cause to become effective a new "shelf" registration statement as promptly as practicable. If, after the Shelf Registration has become effective, any stop order, injunction or other order or requirement of the Commission or other Governmental Authority or other Person with regulatory authority over the Issuer is threatened, then the Issuer shall use its reasonable best efforts to prevent the issuance of any order suspending the effectiveness of the Shelf Registration or any order preventing or suspending the use of any preliminary prospectus and, if any such order is issued, to obtain the withdrawal of any such order as soon as reasonably practicable.

(c) Limitation. The provisions of this Section 2.03 shall be applicable to each take-down from a Shelf Registration initiated under this Section 2.03 and any subsequent resale of Registrable Securities pursuant thereto; provided, that the reasonably anticipated gross proceeds from any such take-down from a Shelf Registration initiated under this Section 2.03 shall equal at least $10,000,000.

(d) Shelf Registration Expenses. The Issuer shall be liable for and pay all Registration Expenses in connection with each Shelf Registration, regardless of whether such Shelf Registration is effected, and any underwritten resale of Registrable Securities which is not pursuant to a Demand Registration under Section 2.01 and with respect to which such Shelf Registration is expressly being utilized to effect such resale (an "Underwritten Shelf Take-Down"); provided, that the Participating Holders holding Registrable Securities shall each pay their *pro rata* portion (based on the number of shares each Participating Holder is selling) of all underwriting discounts, selling commissions and stock transfer taxes applicable to such resale of Registrable Securities.

Section 2.04 Lock-Up Agreements.

(a) Lock-up. In connection with each underwritten Public Offering and if requested by the managing underwriter, the Holders agree not to effect any public sale or private offer or distribution (other than a distribution-in-kind *pro rata* to all stockholders, limited partners or members, as the case may be, or to immediate family members, of such Holder) of any Registrable Securities during the ten (10) days prior to the consummation of such Public Offering and during such time period after the consummation of such Public Offering, not to exceed ninety (90) days, as may be requested by the managing underwriter; provided, that such lock-up agreements are also required from all directors, executive officers and Holders who hold Registrable Securities; provided, further, that each such director, executive officer or Holder referenced in the foregoing proviso, shall enter into such lock-up agreements if so required. Notwithstanding the foregoing, this Section 2.04 shall not apply to any sale by a Holder or a director or officer of a Holder of Shares acquired in open market transactions or block purchases by such Holder or its Affiliates subsequent to the Initial Public Offering. Any discretionary waiver or reduction of the requirements under the foregoing provisions made by the Issuer or the applicable lead managing underwriters shall apply to each Holder on a *pro rata* basis except as otherwise agreed in any lock-up agreement delivered by a Holder to the underwriter(s) in connection with any underwritten Public Offering.

(b) Notwithstanding anything herein to the contrary, if the Issuer shall, at any time, register under the Securities Act an offering and sale of Registrable Securities held by the Holders for sale to the public pursuant to an underwritten Public Offering, the Issuer shall not, without the prior written consent of the lead underwriters for such offering, effect any public sale or distribution of securities similar to those being registered, or any securities convertible into or exercisable or exchangeable for such securities, for such period as shall be determined by the lead underwriters and that is for the same period and on substantially similar terms as agreed to by the Advent Stockholders.

Section 2.05 Registration Procedures. Whenever any Holders request that any Registrable Securities be registered pursuant to, and in accordance with, Section 2.01, Section 2.02, or Section 2.03 hereof, subject to the provisions of such Sections, the Issuer shall use its reasonable best efforts to effect the registration and the sale of such Registrable Securities in accordance with the intended method of disposition thereof as quickly as practicable, and, in connection with any such request:

(a) The Issuer shall, as expeditiously as possible, and, if the Issuer is not qualified for the use of Form S-3, no later than sixty (60) days from the date of receipt by the Issuer of the written request, and if the Issuer is qualified for use of Form S-3, no later than forty-five (45) days from the date of receipt by the Issuer of the written request, prepare and file with the Commission a Registration Statement on any form for which the Issuer then qualifies and the managing underwriter, if any, and the holders of a majority in interest of Registrable Securities held by the Advent Stockholders shall deem appropriate and which form shall be available for the sale of the Registrable Securities to be registered thereunder in accordance with the intended method of distribution thereof, and use its reasonable best efforts to cause such filed Registration Statement to become and remain effective for a period of not less than one-hundred and eighty (180) days or in the case of a Shelf Registration, not less than two (2) years (or such shorter period in which all of the Registrable Securities of the Advent Stockholders included in such Registration Statement shall have actually been sold thereunder); provided, however, that such one-hundred and eighty (180) day period or two (2) year period, as applicable, shall be extended for a period of time equal to the period any Holder refrains from selling any securities included in such registration at the request of an underwriter and, in the case of any Shelf Registration, subject to compliance with applicable Commission rules, such two (2) year period shall be extended, if necessary, to keep the Registration Statement effective until all such Registrable Securities are sold.

(b) Prior to filing a Registration Statement or prospectus or any amendment or supplement thereto, the Issuer shall furnish to each Participating Holder and each underwriter, if any, of the Registrable Securities covered by such Registration Statement, copies of such Registration Statement as proposed to be filed, and thereafter the Issuer shall furnish to such Holder and underwriter, if any, such number of copies of such Registration Statement, each amendment and supplement thereto (in each case including all exhibits thereto and documents incorporated by reference therein), the prospectus included in such Registration Statement (including each preliminary prospectus and any summary prospectus) and any other prospectus filed under Rule 424 or Rule 430A under the Securities Act and such other documents as such Holder or underwriter may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such Holder.

(c) After the filing of the Registration Statement, the Issuer shall (i) promptly notify each Holder holding Registrable Securities covered by such Registration Statement of the time when such Registration Statement has been declared effective or a supplement or amendment to any prospectus forming a part of such Registration Statement has been filed, (ii) cause the related prospectus to be supplemented by any required prospectus supplement, and, as

so supplemented, to be filed pursuant to Rule 424 under the Securities Act and shall incorporate such information as the managing underwriter or underwriters and each Holder holding Registrable Securities covered by such Registration Statement agree should be included therein relating to the plan of distribution, (iii) comply with the provisions of the Securities Act with respect to the disposition of all Registrable Securities covered by such Registration Statement during the applicable period in accordance with the intended methods of disposition thereof by the Holders set forth in such Registration Statement or supplement to such prospectus, and (iv) promptly notify each Holder holding Registrable Securities covered by such Registration Statement of any stop order issued or threatened by the Commission or any state securities commission and take all reasonable actions required to prevent the entry of such stop order or to remove it if entered.

(d) The Issuer shall use its reasonable best efforts to (i) register or qualify the Registrable Securities covered by such Registration Statement under such other securities or "blue sky" laws of such jurisdictions in the United States as any Holder holding such Registrable Securities reasonably (in light of such Holder's intended plan of distribution) requests and (ii) cause such Registrable Securities to be registered with or approved by such other Governmental Authorities as may be necessary by virtue of the business and operations of the Issuer and do any and all other acts and things that may be reasonably necessary or advisable to enable Holders to consummate the disposition of the Registrable Securities owned by them; provided, that the Issuer shall not be required to (A) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 2.05(d), (B) subject itself to taxation in any such jurisdiction, or (C) consent to general service of process in any such jurisdiction.

(e) The Issuer shall immediately notify each Holder holding Registrable Securities covered by such Registration Statement, at any time when a prospectus relating thereto is required to be delivered under the Securities Act, of the occurrence of an event requiring the preparation of a supplement or amendment to such prospectus so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading and promptly prepare and make available to each such Holder and file with the Commission any such supplement or amendment.

(f) The Board shall have the right to select the underwriter or underwriters in connection with any Public Offering, provided that the holders of a majority of the Registrable Securities included in any Demand Registration or Underwritten Shelf Take-Down shall have the right to select the underwriter or underwriters in connection with such Public Offering. In connection with any Public Offering, the Issuer shall enter into customary agreements (including an underwriting agreement in customary form, provided that the scope of the indemnity contained in such underwriting agreement on the part of the selling Holders is not more extensive than the indemnity described in Section 3.01(b) hereof), provided that such agreements are consistent with this Agreement, and take all such other actions as are reasonably required in order to expedite or facilitate the disposition of such Registrable Securities in any such Public Offering, including the engagement of a "qualified independent underwriter" in connection with the qualification of the underwriting arrangements with FINRA. The Issuer shall make such representations and warranties to the holders of Registrable Securities being registered, and the

underwriters or agents, if any, in form, substance and scope as are customarily made by issuers in secondary underwritten public offerings and take any other actions as the holders of the Registrable Securities being registered or the managing underwriter or underwriters, if any, reasonably request in order to expedite or facilitate the registration and disposition of such Registrable Securities. Each Holder participating in such underwriting shall also enter into such agreement, provided that the terms of any such agreement are consistent with this Agreement.

(g) Upon execution of confidentiality agreements in form and substance reasonably satisfactory to the Issuer, the Issuer shall make available for inspection by the Holders and any underwriter participating in any disposition pursuant to a Registration Statement being filed by the Issuer pursuant to this Section 2.05 and any attorney, accountant or other professional retained by the Holders or any such underwriter (collectively, the "Inspectors"), all financial and other records, pertinent corporate documents and properties of the Issuer (collectively, the "Records") as shall be reasonably necessary or desirable to enable them to exercise their due diligence responsibility, and cause the Issuer's officers, managers, directors and employees to supply all information reasonably requested by any Inspectors in connection with such Registration Statement. Records that the Issuer determines, in good faith, to be confidential and that it notifies the Inspectors are confidential shall not be disclosed by the Inspectors unless (i) the disclosure of such Records is necessary to avoid or correct a misstatement or omission in such Registration Statement or (ii) the release of such Records is ordered pursuant to a subpoena or other order from a court of competent jurisdiction or is otherwise required by law. Each Holder agrees that at the time that such Holder is a Participating Holder, information obtained by it as a result of such inspections shall be deemed confidential and shall not be used by it or its Affiliates as the basis for any market transactions in Shares unless and until such information is made generally available to the public, and further agrees that, upon learning that disclosure of such Records is sought in a court of competent jurisdiction, it shall give notice to the Issuer and allow the Issuer, at its expense, to undertake appropriate action to prevent disclosure of the Records deemed confidential.

(h) The Issuer shall cause to be furnished to each such underwriter, if any, a signed counterpart, addressed to such underwriter, of (i) an opinion or opinions of counsel to the Issuer and (ii) a comfort letter or comfort letters from the Issuer's independent public accountants, each in customary form and covering such matters of the kind customarily covered by opinions or comfort letters, as the case may be, as such managing underwriter therefor reasonably requests; provided, that, if a signed counterpart of an opinion or opinions of counsel to the Issuer is furnished to the Advent Stockholders, such opinion or opinions of counsel to the Issuer shall also be furnished to each other Participating Holder holding Registrable Securities.

(i) The Issuer shall otherwise use its reasonable best efforts to comply with all applicable rules and regulations of the SEC, and make available to its security holders, as soon as reasonably practicable, an earnings statement or such other document that shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder. The Issuer shall cooperate with each seller of Registrable Securities and each underwriter, if any, participating in the disposition of such Registrable Securities and their respective counsel in connection with any filings to be made with FINRA.

(j) The Issuer may require each Participating Holder, by written notice given to each such Participating Holder not less than ten (10) days prior to the filing date of such Registration Statement, to promptly, and in any event within seven (7) days after receipt of such notice, furnish in writing to the Issuer such information regarding the distribution of the Registrable Securities as the Issuer may from time to time reasonably request and such other information as may be legally required in connection with such registration. Each holder of Registrable Securities agrees to furnish such information to the Issuer and cooperate with the Issuer as reasonably necessary to enable the Issuer to comply with the provisions of this Agreement.

(k) Each Holder agrees that at the time that such Holder is a Participating Holder, upon receipt of any written notice from the Issuer of the occurrence of any event requiring the preparation of a supplement or amendment of a prospectus relating to the Registrable Securities covered by a Registration Statement that is required to be delivered under the Securities Act so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or to make the statements therein not misleading, such Holder shall forthwith discontinue disposition of Registrable Securities pursuant to the Registration Statement covering such Registrable Securities until such Holder's receipt of the copies of a supplemented or amended prospectus, and, if so directed by the Issuer, such Holder shall deliver to the Issuer all copies, other than any permanent file copies then in such Holder's possession, of the most recent prospectus covering such Registrable Securities at the time of receipt of such notice. If the Issuer shall give such notice, the Issuer shall extend the period during which such Registration Statement shall be maintained effective (including the period referred to in Section 2.05(a)) by the number of days during the period from and including the date of the giving of notice pursuant to Section 2.05(e) to the date when the Issuer shall make available to such Holder a prospectus supplemented or amended to conform with the requirements of Section 2.05(e).

(l) The Issuer shall use its reasonable best efforts to list all Registrable Securities covered by such Registration Statement on the New York Stock Exchange or any other securities exchange (including NASDAQ) on which any of the Registrable Securities are then listed or traded and if none of the Registrable Securities are so listed, on any securities exchange (including NASDAQ) on which similar securities issued by the Issuer are then listed, and if no such similar securities are listed, on any national securities exchange.

(m) The Issuer shall have appropriate officers of the Issuer (i) prepare and make presentations at any "road shows" and before analysts and rating agencies, as the case may be, (ii) take other reasonable actions to obtain ratings for any Registrable Securities, and (iii) otherwise use their reasonable best efforts to cooperate as requested by the underwriters in the offering, marketing or selling of the Registrable Securities.

(n) If any Registration Statement refers to any Holder by name or otherwise as the holder of any Shares, and if, based on the reasonable advice of such Holder's counsel, such Holder is or would be deemed to be an underwriter or a controlling person of the Issuer, then such Holder shall have the right to require (i) the insertion of language in the Registration Statement, in form and substance satisfactory to such Holder and presented to the Issuer in

writing, to the effect that the holding by such Holder of such Shares is not to be construed as a recommendation by such Holder of the investment quality of the Issuer's equity securities covered thereby and that such holding does not imply that such Holder shall assist in meeting any future financial requirements of the Issuer, or (ii) in the event that such reference to such Holder by name or otherwise is not required by the Securities Act or any similar federal statute then in force, the deletion of the reference to such Holder.

Section 2.06 Deferral or Suspension of Registration Statement. The Issuer may defer the filing (but not the preparation) of a Registration Statement, or suspend the continued use of a Registration Statement, required by this Section 2.01, Section 2.02 or Section 2.03 for a period of up to ninety (90) days after the request to file a Registration Statement if at the time the Issuer receives the request to register Registrable Securities, the Issuer or any of its Subsidiaries are engaged in confidential negotiations or other confidential business activities, disclosure of which would be required in such Registration Statement (but would not be required if such Registration Statement were not filed), and the Board determines in good faith, after consultation with external legal counsel, (i) that such disclosure would have a material adverse effect on the Issuer or its business or on the Issuer's ability to effect a proposed material acquisition, disposition, financing, reorganization, recapitalization or similar transaction or (ii) require premature disclosure of material information that the Issuer has a bona fide business purpose for preserving as confidential.

(i) A deferral of the filing of a Registration Statement, or the suspension of the continued use of a Registration Statement, pursuant to this Section 2.06, shall be promptly lifted, and the requested Registration Statement shall be filed as expeditiously as possible, in the case of a deferral, if the negotiations or other activities are disclosed or terminated.

(ii) In order to defer the filing of a Registration Statement, or suspend the continued use of a Registration Statement, pursuant to this Section 2.06, the Issuer shall promptly (but in any event within five (5) days), upon determining to seek such deferral or suspension, deliver to the Requesting Stockholders a certificate signed by the Board stating that the Issuer is deferring such filing, or suspending the continued use of a Registration Statement, pursuant to this Section 2.06 and a general statement of the reason for such deferral or suspension, as the case may be, and an approximation of the anticipated delay.

(iii) The Issuer may defer the filing, or suspend the continued use of, a particular Registration Statement pursuant to this Section 2.06 no more than twice in any twelve (12) month period; provided, that there must be an interim period of at least ninety (90) days between the end of one deferral or suspension period and the beginning of a subsequent deferral or suspension period.

(iv) In the event the Issuer exercises its rights under this Section 2.06, the Issuer will, within ten (10) days following receipt by the Requesting Stockholders of the notice of deferral or suspension, as the case may be, update the deferred or suspended Registration Statement as may be necessary to permit the Requesting Stockholders to resume use thereof in connection with the offer and sale of its Registrable Securities in accordance with applicable law.

ARTICLE III

INDEMNIFICATION AND CONTRIBUTION

Section 3.01 Indemnification.

(a) Indemnification by the Issuer. The Issuer shall indemnify and hold harmless each Indemnified Party under clause (ii) of such definition from and against any and all losses, claims, actions, damages, liabilities and expenses (including reasonable expenses of investigation and reasonable attorneys' fees and expenses), joint or several, ("Damages") caused by, arising out of or relating to any untrue statement or alleged untrue statement of a material fact contained in any Registration Statement or prospectus relating to the Registrable Securities or any other securities held by the holders of Registrable Securities that are expressly included therein by the Issuer or any preliminary prospectus or free writing prospectus (as defined in Rule 405 promulgated under the Securities Act) (each, as amended or supplemented if the Issuer shall have furnished any amendments or supplements thereto) related thereto, or caused by or relating to any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or caused by or related to any violation or alleged violation of the Securities Act or Exchange Act, except insofar as such Damages are caused by or related to any such untrue statement or omission or alleged untrue statement or omission so made in reliance upon and in conformity with information furnished in writing to the Issuer by such Holder or on such Holder's behalf expressly for use therein. The indemnification provided for under this Section 3.01 shall remain in full force and effect regardless of any investigation made by or on behalf of an Indemnified Party or a subsequent Transfer by an Indemnified Party of its equity securities in the Issuer. No Holder shall be liable under this Section 3.01 for any Damages in excess of the net proceeds realized by such Holder in the sale of Registrable Securities of such Holder to which such Damages relate.

(b) Indemnification by the Participating Holders. Each Holder, at the time that such Holder is a Participating Holder, agrees, severally but not jointly, to indemnify and hold harmless from and against all Damages each Indemnified Party under clause (i) of such definition with respect to information furnished in writing to the Issuer by such Holder or on such Holder's behalf expressly for use in any Registration Statement or prospectus relating to the Registrable Securities, or any amendment or supplement thereto, or any preliminary prospectus. As a condition to including Registrable Securities in any Registration Statement filed in accordance with Articles II and III, the Issuer may require that it shall have received an undertaking reasonably satisfactory to it from any underwriter to indemnify and hold it harmless to the extent customarily provided by underwriters with respect to similar securities. No Holder shall be liable under this Section 3.01(b) for any Damages in excess of the net proceeds realized by such Holder in the sale of Registrable Securities of such Holder to which such Damages relate.

(c) Conduct of Indemnification Proceedings. If any proceeding (including any governmental investigation) shall be instituted involving any Indemnified Party in respect of which indemnity may be sought pursuant to Articles II and III, such Indemnified Party shall promptly notify the Person against whom such indemnity may be sought (the "Indemnifying Party") in writing and the Indemnifying Party shall assume the defense thereof, including the employment of counsel reasonably satisfactory to such Indemnified Party, and shall assume the payment of all fees and expenses, provided that the failure of any Indemnified Party so to notify the Indemnifying Party shall not relieve the Indemnifying Party of its obligations hereunder except to the extent that the Indemnifying Party is materially prejudiced by such failure to notify. In any such proceeding, any Indemnified Party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party unless (i) the Indemnifying Party and the Indemnified Party shall have mutually agreed to the retention of such counsel or (ii) in the reasonable judgment of such Indemnified Party, representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood that, in connection with any proceeding or related proceedings in the same jurisdiction, the Indemnifying Party shall not be liable for the reasonable fees and expenses of more than one separate firm of attorneys (in addition to any local counsel) at any time for all such Indemnified Parties, and that all such fees and expenses shall be reimbursed as they are incurred. In the case of any such separate firm for the Indemnified Parties, such firm shall be designated in writing by the Indemnified Parties. The Indemnifying Party shall not be liable for any settlement of any proceeding effected without its written consent, which consent shall not be unreasonably withheld, but if settled with such consent, or if there be a final judgment for the plaintiff, the Indemnifying Party shall indemnify and hold harmless such Indemnified Parties from and against any Damages (to the extent stated above) by reason of such settlement or judgment. Without the prior written consent of the Indemnified Party, no Indemnifying Party shall effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Party is or could have been a party and indemnity could have been sought hereunder by such Indemnified Party, unless such settlement (a) includes an unconditional release of such Indemnified Party from all liability arising out of such proceeding, (b) does not contain a statement about or an admission of fault, culpability or failure to act by or on behalf of such Indemnified Party and (c) does not commit such Indemnified Party to take, or hold back from taking, any action.

Section 3.02 Contribution.

(a) If the indemnification provided for in Section 3.01 is unavailable to the Indemnified Parties or insufficient in respect of any Damages (other than by reason of the exceptions provided herein), then each such Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Damages, as between the Issuer on the one hand and each such Holder on the other, in such proportion as is appropriate to reflect the relative fault of the Issuer and of each such Holder in connection with such statements or omissions, as well as any other relevant equitable considerations. The relative fault of the Issuer on the one hand and of each such Holder on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by such party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(b) The Issuer and the Holders agree that it would not be just and equitable if contribution pursuant to this Section 3.02(b) were determined by pro rata allocation or by any other method of allocation that does not take account of the equitable considerations referred to in the immediately preceding paragraph. The amount paid or payable by an Indemnified Party as a result of the Damages referred to in the immediately preceding paragraph shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 3.02(b), no Holder shall be required to contribute any amount in excess of the amount by which the net proceeds realized by such Holder in the sale of Registrable Securities of such Holder to which such Damages relate exceeds the amount of any Damages that such Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. Subject to the foregoing and as among the Holders, each Holder's obligation to contribute pursuant to this Section 3.02(b) is several in the proportion that the proceeds of the offering received by such Holder bears to the total proceeds of the offering received by all such Participating Holder and not joint.

ARTICLE IV

MISCELLANEOUS

Section 4.01 Term. This Agreement shall terminate upon the time as there are no issued and outstanding Registrable Securities, except for the all the provisions of Articles III and IV, all of which shall survive any such termination.

Section 4.02 Existing Registration Statements. Notwithstanding anything herein to the contrary and subject to applicable law and regulation, the Issuer may satisfy any obligation hereunder to file a Registration Statement or to have a Registration Statement become effective by a specified date by designating, by notice to the Holders, a Registration Statement that previously has been filed with the Commission or become effective, as the case may be, as the relevant Registration Statement for purposes of satisfying such obligation, and all references to any such obligation shall be construed accordingly; provided, that such previously filed Registration Statement may be amended to add the number of Registrable Securities, and, to the extent necessary, to identify as selling stockholders those Holders demanding the filing of a Registration Statement pursuant to the terms of this Agreement. To the extent this Agreement refers to the filing or effectiveness of other Registration Statements by or at a specified time and the Issuer has, in lieu of then filing such Registration Statements or having such Registration Statements become effective, designated a previously filed or effective Registration Statement as the relevant Registration Statement for such purposes in accordance with the preceding sentence, such references shall be construed to refer to such designated Registration Statement.

Section 4.03 Other Activities. Notwithstanding anything in this Agreement, none of the provisions of this Agreement shall in any way limit the Advent Stockholders or any of their Affiliates from engaging in any brokerage, investment advisory, financial advisory, anti-raid advisory, merger advisory, financing, asset management, trading, market making, arbitrage, investment activity and other similar activities conducted in the ordinary course of their business.

Section 4.04 Specific Performance, Cumulative Remedies. The parties hereto acknowledge that money damages may not be an adequate remedy for violations of this Agreement and that any party, in addition to any other rights and remedies which the parties may have hereunder or at law or in equity, may, in his or its sole discretion, apply to a court of competent jurisdiction for specific performance or injunction or such other relief as such court may deem just and proper in order to enforce this Agreement or prevent any violation hereof and, to the extent permitted by applicable law, each party waives any objection to the imposition of such relief. All rights, powers and remedies provided under this Agreement or otherwise available in respect hereof at law or in equity shall be cumulative and not alternative, and the exercise or beginning of the exercise of any thereof by any party shall not preclude the simultaneous or later exercise of any other such rights, powers or remedies by such party.

Section 4.05 Attorneys' Fees. In any action or proceeding brought to enforce any provision of this Agreement or where any provision hereof is validly asserted as a defense, the -successful party shall, to the extent permitted by applicable law, be entitled to recover reasonable attorneys' fees in addition to any other available remedy.

Section 4.06 Notices. In the event a notice or other document is required to be sent hereunder to the Company or any Holder or legal representative of a Holder, such notice or other document shall be made in writing by hand-delivery, registered or certified first class mail, fax, email or courier guaranteeing overnight delivery to such party at the following addresses (or at such other address as shall be given in writing by any party to the others):

in the case of the Issuer, to each of the following:

NCS Multistage Holdings, Inc.
19450 State Highway 249, Suite 200
Houston, TX
Attn:
Email:

with a copy to:

Weil, Gotshal & Manges LLP
767 Fifth Avenue
New York, NY 10153
Attention: Alexander Lynch and Marilyn French Shaw
Email: alexander.lynch@weil.com
marilynfrench.shaw@weil.com

if to the Advent Stockholder, to:

Advent-NCS Acquisition Limited Partnership
75 State Street
Boston, MA 02110

Attention: Gurinder Grewal and James Westra
Email: ggrewal@adventinternational.com
jwestra@adventinternational.com

with a copy (which shall not constitute notice) to:

Weil, Gotshal & Manges LLP
100 Federal Street
Boston, MA 02110
Attention: Marilyn French Shaw
Email: marilynfrench.shaw@weil.com

If to any Management Holder or other Holder, to the address or email address set forth on the books of the Issuer or any other address or email address as a party may hereafter specify for such purpose to the Issuer.

The Issuer or any Holder or their respective legal representatives may effect a change of address for purposes of this Agreement by giving notice of such change to the Issuer, and the Issuer shall, upon the request of any such Person, notify the other parties hereto of such change in the manner provided herein. Until such notice of change of address is properly given, the addresses set forth herein shall be effective for all purposes.

All such notices shall be deemed to have been duly given: when delivered by hand, if personally delivered; three (3) Business Days after being deposited in the mail, postage prepaid, if mailed; when transmission confirmation is received, if faxed or emailed; and on the next Business Day, if timely delivered to a courier guaranteeing overnight delivery.

Section 4.07 Amendment; Wavier. Any provision of this Agreement may be amended or waived if, and only if such amendment or waiver is in writing and signed, in the case of an amendment, by the majority in interest of the Registrable Securities held by the Holders or, in the case of a waiver, by any of the following parties against whom such waiver is to be effective with respect to the Company or Holders, as applicable: (i) the Company, (ii) the holders of a majority in interest of the Registrable Securities owned by the Advent Stockholders and (iii) the holders of a majority in interest of the Registrable Securities owned by the Management Holders, provided, that any amendment that would have a disproportionate material adverse effect on a Holder relative to the other Holders shall require the written consent of the effected Holder.

Section 4.08 Restriction on Issuer/ Issuer Grants of Subsequent Registration Rights. So long as the Advent Stockholders hold any Registrable Securities in respect of which registration rights provided for in Section 2.01 of this Agreement remain in effect, the Issuer will not, directly or indirectly, without the prior written consent of each of the holders of a majority in interest of the Registrable Securities owned by the Advent Stockholders, grant to any Person or agree to otherwise become obligated in respect of (i) the rights of registration in the nature or substantially in the nature of those set forth in Section 2.01 of this Agreement that would have priority over or parity with the Registrable Securities with respect to the inclusion of such securities in any registration or (ii) demand registration rights exercisable prior to such time as the Advent Stockholders can first exercise its rights under Section 2.01.

Section 4.09 Cooperation by the Issuer. With a view to making available to the Holders the benefits of certain rules and regulations of the Commission that may at any time permit the sale of securities to the public without registration, the Board agrees to use, and to cause the Issuer to use, its reasonable best efforts to:

(a) make and keep public information available, as those terms are defined in Rule 144, at all times after the effective date that the Issuer becomes subject to the reporting requirements of the Securities Act or the Exchange Act;

(b) file with the Commission in a timely manner all reports and other documents required of the Issuer under the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements);

(c) furnish to any Holder, so long as such Holder owns any Registrable Securities, (i) upon request by such Holder, a written statement by the Issuer that it has complied with the reporting requirements of Rule 144 (at any time after ninety (90) days after the effective date of the first Registration Statement filed by the Issuer for a Public Offering), and of the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements) or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) upon request by such Holder, a copy of the most recent annual or quarterly report of the Issuer and (iii) such other reports and documents of the Issuer and other information in the possession of, or reasonably obtainable by, the Issuer as such Holder may reasonably request in availing itself of any rule or regulation of the Commission allowing a Holder to sell any such securities without registration; and

(d) upon the request of any Holder, instruct the transfer agent in writing that it shall rely on the written legal opinion of such Holder's counsel, and shall act in accordance with the written instructions of such Holder's counsel, with respect to any transfer of Shares.

Section 4.10 Successors, Assigns and Transferees.

(a) The registration rights granted pursuant to this Agreement shall not be assignable or Transferred except to a Permitted Transferee in accordance with this Section 4.10.

(b) If any Permitted Transferee shall acquire Shares from any Holder in compliance with the terms of this Agreement, such transferring Holder shall promptly notify the Issuer and, except to the extent limited by such Holder transferring such Shares, such Shares acquired from such Holder shall be subject to all of the terms of this Agreement, and any transferee thereof shall execute and deliver to the Issuer a joinder agreement in the form of Exhibit A, whereupon such transferee shall be entitled to receive the benefits of, and be conclusively deemed to have agreed to be bound by and to perform, all of the terms and provisions of this Agreement that are applicable to the Holder transferring such Shares.

Section 4.11 Binding Effect. Except as otherwise provided in this Agreement, the terms and provisions of this Agreement shall be binding on and inure to the benefit of each of the parties hereto and their respective successors.

Section 4.12 Third Parties. It is understood and agreed among the parties that this Agreement and the covenants made herein are made expressly and solely for the benefit of the parties hereto, and that no other Person, other than an Indemnified Party pursuant to Article III shall be entitled or be deemed to be entitled to any benefits or rights hereunder, nor be authorized or entitled to enforce any rights, claims or remedies hereunder or by reason hereof.

Section 4.13 Governing Law; Submission to Jurisdiction; Waiver of Jury Trial.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware applicable to contracts entered into and performed entirely within such State.

(b) Any claim, action, suit or proceeding (whether in contract or tort) seeking to enforce any provision of, or based on any matter arising out of or in connection with, this Agreement or the transactions contemplated hereby shall be heard and determined in the Chancery Court of the State of Delaware and any state appellate court therefrom within the State of Delaware (or, if the Chancery Court of the State of Delaware declines to accept jurisdiction over a particular matter, any state or federal court within the State of Delaware), and each of the parties hereto hereby consents to the exclusive jurisdiction of such courts (and of the appropriate appellate courts therefrom in any such claim, action, suit or proceeding) and irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of venue of any such claim, action, suit or proceeding in any such court or that any such claim, action, suit or proceeding that is brought in any such court has been brought in an inconvenient forum.

(c) Subject to applicable Law, process in any such claim, action, suit or proceeding may be served on any party anywhere in the world, whether within or without the jurisdiction of any such court. Without limiting the foregoing and subject to applicable Law, each party agrees that service of process on such party as provided in Section 4.06 shall be deemed effective service of process on such party. Nothing herein shall affect the right of any party to serve legal process in any other manner permitted by Law or at equity. WITH RESPECT TO ANY SUCH CLAIM, ACTION, SUIT OR PROCEEDING IN ANY SUCH COURT, TO THE EXTENT NO PROHIBITED BY APPLICABLE LAW WHICH CANNOT BE WAIVED, EACH OF THE PARTIES IRREVOCABLY WAIVES AND RELEASES TO THE OTHER ITS RIGHT TO A TRIAL BY JURY, AND AGREES THAT IT WILL NOT SEEK A TRIAL BY JURY IN ANY SUCH PROCEEDING. EACH PARTY HERETO ACKNOWLEDGES THAT IT HAS BEEN INFORMED BY THE OTHER PARTIES HERETO THAT THIS SECTION 4.13 CONSTITUTES A MATERIAL INDUCEMENT UPON WHICH THEY ARE RELYING AND WILL RELY IN ENTERING INTO THIS AGREEMENT. ANY PARTY HERETO MAY FILE AN ORIGINAL COUNTERPART OR A COPY OF THIS SECTION 4.13 WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF EACH SUCH PARTY TO THE WAIVER OF ITS RIGHT TO TRIAL BY JURY.

Section 4.14 Severability. If any portion of this Agreement shall be declared void or unenforceable by any court or administrative body of competent jurisdiction, then, so long as no party is deprived of the benefits of this Agreement in any material respect, such portion shall be deemed severable from the remainder of this Agreement, which shall continue in all respects valid and enforceable.

Section 4.15 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute a single instrument. Copies of executed counterparts transmitted by telecopy or other electronic transmission service shall be considered original executed counterparts for purposes of this Section 4.15.

Section 4.16 Headings. The headings and subheadings in this Agreement are included for convenience and identification only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this Agreement or any provision hereto.

[REMAINDER INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

[*Signature Pages Follow*]

COMPANY

NCS MULTISTAGE HOLDINGS, INC.

By: _____

Name:

Title:

ADVENT STOCKHOLDERS

ADVENT-NCS ACQUISITION LIMITED PARTNERSHIP

By: Advent-NCS GP LLC,
its General Partner

By: _____
Name: Michael Ristaino
Title: President

MANAGEMENT HOLDERS

NIPPER CORPORATE HOLDINGS, LLC

By: _____
Name: Robert Nipper
Title: Manager

CEMBLEND SYSTEMS, INC.

By: _____
Name: Marty Stromquist
Title: Chief Executive Officer

SKPT HOLDINGS, LLC

By: _____
Name: Timothy Willems
Title: Manager

EXHIBIT A

JOINDER TO THE REGISTRATION RIGHTS AGREEMENT

[•], 20[•]

This Joinder Agreement (the "Joinder Agreement") is made as of the date written above by the undersigned (the "Joining Party") in accordance with the Registration Rights Agreement dated as of [•], 2017 (as amended and restated or otherwise modified from time to time, the "Registration Rights Agreement") among NCS Multistage Holdings, Inc. and the other persons listed on the signature pages thereto. Capitalized terms used, but not defined, herein shall have the respective meanings of ascribed to such terms in the Registration Rights Agreement.

The Joining Party hereby acknowledges, agrees and confirms that, by its execution of this Joinder Agreement, the Joining Party shall be deemed to be a party to the Registration Rights Agreement as of the date hereof and shall have all of the rights and obligations of [an "Advent Stockholder"][a "Management Holder] thereunder as if it had executed the Registration Rights Agreement. The Joining Party hereby ratifies, as of the date hereof, and agrees to be bound by, all of the terms, provisions and conditions contained in the Registration Rights Agreement.

Name:
Address:
Telephone:
Facsimile:

AGREED ON THIS [ ] day of [ ], 20 :

NCS MULTISTAGE HOLDINGS, INC.

By: _____

Name:
Title:

Exhibit 5.1

Weil, Gotshal & Manges LLP

767 Fifth Avenue
New York, NY 10153-0119
+1 212 310 8000 tel
+1 212 310 8007 fax

April 17, 2017

NCS Multistage Holdings, Inc.
19450 State Highway 249
Suite 200
Houston, TX 77070

Ladies and Gentlemen:

We have acted as counsel to NCS Multistage Holdings, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission of the Company's Registration Statement on Form S-1 Registration No. 333-216580 (as amended, and including any subsequent registration statement on Form S-1 filed pursuant to Rule 462(b), the "Registration Statement"), under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of (i) the offer, issuance and sale by the Company of up to the number of shares of common stock, par value $0.01 per share (the "Common Stock"), of the Company specified in the Registration Statement (together with any additional shares that may be sold by the Company pursuant to Rule 462(b) under the Act, the "Company Shares") and (ii) the offer and sale by the selling stockholders named in the Underwriting Agreement (the "Selling Stockholders") of the number of shares of Common Stock specified in the Registration Statement upon the exercise of the underwriters' option to purchase such shares (together with any additional shares that may be sold by the Selling Stockholders pursuant to Rule 462(b) under the Act, the "Selling Stockholder Shares," and, collectively with the Company Shares, the "Shares"). The Selling Stockholder Shares include shares of Common Stock to be issued by the Company to a Selling Stockholder upon the Company's election pursuant to the Call Rights Agreement (the "Call Rights Agreement") between the Company, certain subsidiaries of the Company and a Selling Shareholder (the "Exchange Shares"). The Shares are to be sold by the Company and the Selling Stockholders pursuant to an underwriting agreement among the Company, the Selling Stockholders and the underwriters named therein (the "Underwriting Agreement"), the form of which has been filed as Exhibit 1.1 to the Registration Statement.

In so acting, we have examined originals or copies (certified or otherwise identified to our satisfaction) of (i) the Registration Statement, (ii) the prospectus contained in the Registration Statement, (iii) the Second Amended and Restated Certificate of Incorporation of the Company to be filed with the Secretary of State of the State of Delaware prior to the consummation of the initial public offering contemplated by the Registration Statement, filed as Exhibit 3.4 to the Registration Statement, (iv) the Amended and Restated Bylaws of the Company to be effective prior to the consummation of the initial public offering contemplated by the Registration Statement, filed as Exhibit 3.5 to the Registration Statement, (v) the form of the Underwriting Agreement, (vi) the Call Rights Agreement and (vii) such corporate records, agreements, documents and other instruments, and such certificates or comparable documents of public officials and of officers and representatives of the Company, and have made such inquiries of such officers and representatives, as we have deemed relevant and necessary as a basis for the opinions hereinafter set forth.

In such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies, and the authenticity of the originals of such latter documents. As to all questions of fact material to this opinion that have not been independently established, we have relied upon certificates or comparable documents of officers and representatives of the Company.

Based on the foregoing, and subject to the qualifications stated herein, we are of the opinion that (i) the Company Shares, when issued and sold as contemplated in the Registration Statement and the Agreement, and upon payment and delivery in accordance with the Agreement, will be validly issued, fully paid and non-assessable, (ii) the Selling Stockholder Shares (other than the Exchange Shares) are validly issued, fully paid and non-assessable and (iii) the Exchange Shares, when issued pursuant to the Call Rights Agreement, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited to the corporate laws of the State of Delaware and we express no opinion as to the effect on the matters covered by this letter of the laws of any other jurisdiction.

We hereby consent to the filing of this letter as an exhibit to the Registration Statement, to the incorporation by reference of this letter into any subsequent registration statement on Form S-1 filed by the Company pursuant to Rule 462(b) of the Act with respect to the Shares and to the reference to our firm under the caption “Legal Matters” in the prospectus which is a part of the Registration Statement. In giving such consent we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Securities and Exchange Commission.

Very truly yours,

/s/ Weil, Gotshal & Manges LLP

Exhibit 10.1

NCS MULTISTAGE HOLDINGS, INC.

2017 EQUITY INCENTIVE PLAN

1. Purpose.

The purpose of the NCS Multistage Holdings, Inc. 2017 Equity Incentive Plan is to further align the interests of eligible participants with those of the Company's stockholders by providing long-term incentive compensation opportunities tied to the performance of the Company and its Common Stock. The Plan is intended to advance the interests of the Company and increase stockholder value by attracting, retaining and motivating key personnel upon whose judgment, initiative and effort the successful conduct of the Company's business is largely dependent.

2. Definitions. Wherever the following capitalized terms are used in the Plan and/or Award Agreement (as defined below), they shall have the meanings specified below:

"*Award*" means an award of a Stock Option, Stock Appreciation Right, Restricted Stock Award, Restricted Stock Unit, Cash Performance Award or Stock Award granted under the Plan.

"*Award Agreement*" means a notice or an agreement entered into between the Company and a Participant setting forth the terms and conditions of an Award granted to a Participant as provided in Section 15.2 hereof.

"*Beneficial Owner*" shall have the meaning ascribed to such term in Rule 13d-3 under the Exchange Act.

"*Board*" means the Board of Directors of the Company.

"*Cash Performance Award*" means an Award that is denominated by a cash amount to an Eligible Person under Section 10 hereof and payable based on or conditioned upon the attainment of pre-established business and/or individual Performance Goals over a specified performance period.

"Cause" shall have the meaning set forth in Section 13.2 hereof.

"*Change of Control*" shall have the meaning set forth in Section 12.2 hereof.

"*Code*" means the Internal Revenue Code of 1986, as amended.

"*Committee*" means (i) the Compensation Committee of the Board, (ii) such other committee of the Board appointed by the Board to administer the Plan or (iii) the Board, as determined by the Board.

"*Common Stock*" means the Company's common stock, par value $0.01 per share.

"*Company*" means NCS Multistage Holdings, Inc., a Delaware corporation or any successor thereto.

"*Date of Grant*" means the date on which an Award under the Plan is granted by the Committee or such later date as the Committee may specify to be the effective date of an Award.

"*Disability*" shall mean, unless otherwise defined in an individual Award Agreement, the Participant has been unable to perform the essential duties, responsibilities and functions of Participant's position with the Company and its subsidiaries by reason of any medically determinable physical or mental impairment for 180 days in any one (1) year period and has qualified to receive long-term disability payments under the Company's long-term disability policy, as may be in effect from time to time. Participant shall cooperate in all respects with the Company if a question arises as to whether he has become subject to a Disability (including, without limitation, submitting to reasonable examinations by one or more medical doctors and other health care specialists selected by the Company and authorizing such medical doctors and other health care specialists to discuss Participant's condition with the Company). Notwithstanding the foregoing, in the event that a Participant is party to an employment, severance or similar agreement with the Company or any of its affiliates and such agreement contains a definition of "Disability," the definition of "Disability" set forth above shall be deemed replaced and superseded, with respect to such Participant, by the definition of "Disability" used in such employment, severance or similar agreement.

"*Effective Date*" shall have the meaning set forth in Section 16.1 hereof.

"*Eligible Person*" means any person who is an employee, Non-Employee Director, consultant or other personal service provider of the Company or any of its Subsidiaries.

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended.

"*Excluded Persons*" means Advent International Corporation and its affiliates.

"*Fair Market Value*" means, with respect to a share of Common Stock as of a given date of determination hereunder, for purposes of determining the exercise price per share of a Stock Option and the base price of a Stock Appreciation Right, (i) the closing price as reported on the NASDAQ or other principal exchange on which the Common Stock is then listed on such date, or if the Common Stock was not traded on such date, then on the next preceding trading day that the Common Stock was traded on such exchange, as reported by such responsible reporting service as the Committee may select or (ii) the initial public offering price of a share of Common Stock for grants of such Awards made in connection with the Company's initial public offering. For all other purposes, "Fair Market Value" shall be such value as determined by the Board in its discretion and, to the extent necessary, shall be determined in a manner consistent with Section 409A of the Code and the regulations thereunder.

"*Incentive Stock Option*" means a Stock Option granted under Section 6 hereof that is intended to meet the requirements of Section 422 of the Code and the regulations thereunder.

"*Non-Employee Director*" means a member of the Board who is not an employee of the Company or any of its Subsidiaries.

"*Nonqualified Stock Option*" means a Stock Option granted under Section 6 hereof that is not an Incentive Stock Option.

"*Participant*" means any Eligible Person who holds an outstanding Award under the Plan.

"*Performance Criteria*" shall have the meaning set forth in Section 10.3 hereof.

"*Performance Goals*" shall have the meaning set forth in Section 10.4 hereof.

"*Performance Stock Unit*" means a Restricted Stock Unit designated as a Performance Stock Unit under Section 9.1 hereof, to be paid or distributed based on or conditioned upon the attainment of pre-established business and/or individual Performance Goals over a specified performance period.

"*Person*" shall have the meaning ascribed to such term in Section 3(a)(9) of the Exchange Act and used in Sections 13(d) and 14(d) thereof, including a "group" as defined in Section 13(d) thereof.

"*Plan*" means the NCS Multistage Holdings, Inc. 2017 Equity Incentive Plan as set forth herein, effective and as may be amended from time to time, as provided herein, and includes any sub-plan or appendix that may be created and approved by the Board to allow Eligible Persons of Subsidiaries to participate in the Plan.

"*Restricted Stock Award*" means a grant of shares of Common Stock to an Eligible Person under Section 8 hereof that are issued subject to such vesting and transfer restrictions as the Committee shall determine, and such other conditions, as are set forth in the Plan and the applicable Award Agreement.

"*Restricted Stock Unit*" means a contractual right granted to an Eligible Person under Section 9 hereof representing notional unit interests equal in value to a share of Common Stock to be paid or distributed at such times, and subject to such conditions, as set forth in the Plan and the applicable Award Agreement.

"*Securities Act*" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder, as the same may be amended from time to time.

"*Service*" means a Participant's employment with the Company or any Subsidiary or a Participant's service as a Non-Employee Director, consultant or other service provider with the Company or any Subsidiary, as applicable.

"*Stock Appreciation Right*" means a contractual right granted to an Eligible Person under Section 7 hereof entitling such Eligible Person to receive a payment, representing the excess of the Fair Market Value of a share of Common Stock over the base price per share of the right, at such time, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

"*Stock Award*" means a grant of shares of Common Stock to an Eligible Person under Section 11 hereof.

"*Stock Option*" means a contractual right granted to an Eligible Person under Section 6 hereof to purchase shares of Common Stock at such time and price, and subject to such conditions, as are set forth in the Plan and the applicable Award Agreement.

"*Subsidiary*" means an entity (whether or not a corporation) that is wholly or majority owned or controlled, directly or indirectly, by the Company or any other affiliate of the Company that is so designated, from time to time, by the Committee, during the period of such affiliated status; provided, however, that with respect to Incentive Stock Options, the term "Subsidiary" shall include only an entity that qualifies under Section 424(f) of the Code as a "subsidiary corporation" with respect to the Company.

3. Administration.

3.1 *Committee Members*. The Plan shall be administered by a Committee comprised of no fewer than two members of the Board who are appointed by the Board to administer the Plan. To the extent deemed necessary by the Board, each Committee member shall satisfy the requirements for (i) an "independent director" under rules adopted by the NASDAQ or other principal exchange on which the Common Stock is then listed, (ii) a "nonemployee director" within the meaning of Rule 16b-3 under the Exchange Act and (iii) an "outside director" under Section 162(m) of the Code. Notwithstanding the foregoing, the mere fact that a Committee member shall fail to qualify under any of the foregoing requirements shall not invalidate any Award made by the Committee which Award is otherwise validly made under the Plan. Neither the Company nor any member of the Committee shall be liable for any action or determination made in good faith by the Committee with respect to the Plan or any Award thereunder.

3.2 *Committee Authority*. The Committee shall have all powers and discretion necessary or appropriate to administer the Plan and to control its operation, including, but not limited to, the power to (i) determine the Eligible Persons to whom Awards shall be granted under the Plan, (ii) prescribe the restrictions, terms and conditions of all Awards, (iii) interpret the Plan and terms of the Awards, (iv) adopt rules for the administration, interpretation and application of the Plan as are consistent therewith, and interpret, amend or revoke any such rules, (v) make all determinations with respect to a Participant's Service and the termination of such Service for purposes of any Award, (vi) correct any defect(s) or omission(s) or reconcile any ambiguity(ies) or inconsistency(ies) in the Plan or any Award thereunder, (vii) make all determinations it deems advisable for the administration of the Plan, (viii) decide all disputes arising in connection with the Plan and to otherwise supervise the administration of the Plan, (ix) subject to the terms of the Plan, amend the terms of an Award in any manner that is not inconsistent with the Plan, (x) accelerate the vesting or, to the extent applicable, exercisability of any Award at any time (including, but not limited to, upon a Change of Control or upon termination of Service under certain circumstances, as set forth in the Award Agreement or otherwise), and (xi) adopt such procedures, modifications or subplans as are necessary or

appropriate to permit participation in the Plan by Eligible Persons who are foreign nationals or employed outside of the United States. The Committee's determinations under the Plan need not be uniform and may be made by the Committee selectively among Participants and Eligible Persons, whether or not such persons are similarly situated. The Committee shall, in its discretion, consider such factors as it deems relevant in making its interpretations, determinations and actions under the Plan including, without limitation, the recommendations or advice of any officer or employee of the Company or board of directors of a Subsidiary or such attorneys, consultants, accountants or other advisors as it may select. All interpretations, determinations, and actions by the Committee shall be final, conclusive, and binding upon all parties.

3.3 *Delegation of Authority*. The Committee shall have the right, from time to time, to delegate in writing to one or more officers of the Company the authority of the Committee to grant and determine the terms and conditions of Awards granted under the Plan, subject to the requirements of Section 157(c) of the Delaware General Corporation Law (or any successor provision) or such other limitations as the Committee shall determine. In no event shall any such delegation of authority be permitted with respect to Awards granted to any member of the Board or to any Eligible Person who is subject to Rule 16b-3 under the Exchange Act or is a covered employee under Section 162(m) of the Code. The Committee shall also be permitted to delegate, to any appropriate officer or employee of the Company, responsibility for performing certain ministerial functions under the Plan. In the event that the Committee's authority is delegated to officers or employees in accordance with the foregoing, all provisions of the Plan relating to the Committee shall be interpreted in a manner consistent with the foregoing by treating any such reference as a reference to such officer or employee for such purpose. Any action undertaken in accordance with the Committee's delegation of authority hereunder shall have the same force and effect as if such action was undertaken directly by the Committee and shall be deemed for all purposes of the Plan to have been taken by the Committee.

4. Shares Subject to the Plan.

4.1 *Number of Shares Reserved*. Subject to adjustment as provided in Section 4.5 hereof, the total number of Shares of Common Stock that are reserved for issuance under the Plan (the "*Share Reserve*") shall equal 4,532,523 shares of Common Stock. Each share of Common Stock subject to an Award shall reduce the Share Reserve by one share; provided, however, that Awards that are required to be paid in cash pursuant to their terms shall not reduce the Share Reserve. Any shares of Common Stock delivered under the Plan shall consist of authorized and unissued shares or treasury shares.

4.2 *Share Replenishment*. To the extent that an Award granted under this Plan is canceled, expired, forfeited, surrendered, settled by delivery of fewer shares of Common Stock than the number underlying the Award, as applicable, or otherwise terminated without delivery of the shares of Common Stock or payment of consideration to the Participant under the Plan, the shares of Common Stock retained by or returned to the Company will (i) not be deemed to have been delivered under the Plan, as applicable, (ii) be available for future Awards under the Plan, and (iii) increase the Share Reserve by one share for each share that is retained by or returned to the Company. Notwithstanding the foregoing, shares of Common Stock that are (a) withheld from an Award in payment of the exercise or purchase price or taxes relating to such an Award or (b) not issued or delivered as a result of the net settlement of an outstanding Stock Option or Stock Appreciation Right under the Plan, as applicable, will be deemed to have been delivered under the Plan and will not be available for future Awards under the Plan.

4.3 *Awards Granted to Eligible Persons Other Than Non-Employee Directors*. For purposes of complying with the requirements of Section 162(m) of the Code, the maximum number of shares of Common Stock that may be subject to (i) Stock Options, (ii) Stock Appreciation Rights, (iii) Restricted Stock Awards that vest in full or in part based on the attainment of Performance Goals, and (iv) Restricted Stock Units that vest in full or in part based on the attainment of Performance Goals, that are granted to any Eligible Person other than a Non-Employee Director during any calendar year shall be limited to 450,000 shares of Common Stock for each such Award type individually (subject to adjustment as provided in Section 4.5 hereof).

4.4 *Awards Granted to Non-Employee Directors*. No Non-Employee Director may be granted, during any calendar year, Awards having a fair value (determined on the date of grant) that, when added to all cash compensation paid to the Non-Employee Director during the same calendar year, exceeds $750,000.

4.5 *Adjustments*. If there shall occur any change with respect to the outstanding shares of Common Stock by reason of any recapitalization, reclassification, stock dividend, extraordinary dividend, stock split, reverse stock split or other distribution with respect to the shares of Common Stock or any merger, reorganization, consolidation, combination, spin-off or other similar corporate change or any other change affecting the Common Stock (other than regular cash dividends to stockholders of the Company), the Committee shall, in the manner and to the extent it considers appropriate and equitable to the Participants and consistent with the terms of the Plan, cause an adjustment to be made to (i) the maximum number and kind of shares of Common Stock provided in Sections 4.1, 4.3 and 4.4 hereof (including the maximum number of shares of Common Stock that may become payable to a Participant provided in Sections 4.3 and 4.4 hereof), (ii) the number and kind of shares of Common Stock, units or other rights subject to then outstanding Awards, (iii) the exercise or base price for each share or unit or other right subject to then outstanding Awards, (iv) the maximum amount that may become payable to a Participant under Cash Performance Awards provided in Section 10.1 hereof, (v) other value determinations applicable to the Plan and/or outstanding Awards, and (vi) any other terms of an Award that are affected by the event. Notwithstanding the foregoing, (a) any such adjustments shall, to the extent necessary, be made in a manner consistent with the requirements of Section 409A of the Code and (b) in the case of Incentive Stock Options, any such adjustments shall, to the extent practicable, be made in a manner consistent with the requirements of Section 424(a) of the Code.

5. Eligibility and Awards.

5.1 *Designation of Participants*. Any Eligible Person may be selected by the Committee to receive an Award and become a Participant. The Committee has the authority, in its discretion, to determine and designate from time to time those Eligible Persons who are to be granted Awards, the types of Awards to be granted, the number of shares of Common Stock or units subject to Awards to be granted and the terms and conditions of such Awards consistent with the terms of the Plan. In selecting Eligible Persons to be Participants, and in determining

the type and amount of Awards to be granted under the Plan, the Committee shall consider any and all factors that it deems relevant or appropriate. Designation of a Participant in any year shall not require the Committee to designate such person to receive an Award in any other year or, once designated, to receive the same type or amount of Award as granted to such Participant in any other year.

5.2 *Determination of Awards*. The Committee shall determine the terms and conditions of all Awards granted to Participants in accordance with its authority under Section 3.2 hereof. An Award may consist of one type of right or benefit hereunder or of two or more such rights or benefits granted in tandem.

5.3 *Award Agreements*. Each Award granted to an Eligible Person shall be represented by an Award Agreement. The terms of all Awards under the Plan, as determined by the Committee, will be set forth in each individual Award Agreements as described in Section 15.2 hereof.

6. Stock Options.

6.1 *Grant of Stock Options*. A Stock Option may be granted to any Eligible Person selected by the Committee, except that an Incentive Stock Option may only be granted to an Eligible Person satisfying the conditions of Section 6.7(a) hereof. Each Stock Option shall be designated on the Date of Grant, in the discretion of the Committee, as an Incentive Stock Option or as a Nonqualified Stock Option. All Stock Options granted under the Plan to U.S. taxpayers are intended to comply with or be exempt from the requirements of Section 409A of the Code.

6.2 *Exercise Price*. The exercise price per share of a Stock Option shall not be less than one hundred percent (100%) of the Fair Market Value of a share of Common Stock on the Date of Grant. The Committee may in its discretion specify an exercise price per share that is higher than the Fair Market Value of a share of Common Stock on the Date of Grant.

6.3 *Vesting of Stock Options*. The Committee shall, in its discretion, prescribe in an award agreement the time or times at which or the conditions upon which, a Stock Option or portion thereof shall become vested and/or exercisable. The requirements for vesting and exercisability of a Stock Option may be based on the continued Service of the Participant with the Company or a Subsidiary for a specified time period (or periods), on the attainment of a specified Performance Goal(s) designed to meet the requirements for exemption under Section 162(m) of the Code and/or on such other terms and conditions as approved by the Committee in its discretion. If the vesting requirements of a Stock Option are not satisfied, the Award shall be forfeited.

6.4 *Term of Stock Options*. The Committee shall in its discretion prescribe in an Award Agreement the period during which a vested Stock Option may be exercised; provided, however, that the maximum term of a Stock Option shall be ten (10) years from the Date of Grant. The Committee may provide that a Stock Option will cease to be exercisable upon or at the end of a specified time period following a termination of Service for any reason as set forth in the Award Agreement or otherwise. A Stock Option may be earlier terminated as specified by the Committee and set forth in an Award Agreement upon or following the termination of a

Participant's Service with the Company or any Subsidiary, including by reason of voluntary resignation, death, Disability, termination for Cause or any other reason. Subject to Section 409A of the Code and the provisions of this Section 6, the Committee may extend at any time the period in which a Stock Option may be exercised.

6.5 *Stock Option Exercise; Tax Withholding*. Subject to such terms and conditions as specified in an Award Agreement, a Stock Option may be exercised in whole or in part at any time during the term thereof by notice in the form required by the Company, together with payment of the aggregate exercise price and applicable withholding tax. Payment of the exercise price may be made: (i) in cash or by cash equivalent acceptable to the Committee, or, (ii) to the extent permitted by the Committee in its sole discretion in an Award Agreement or otherwise (A) in shares of Common Stock valued at the Fair Market Value of such shares on the date of exercise, (B) through an open-market, broker-assisted sales transaction pursuant to which the Company is promptly delivered the amount of proceeds necessary to satisfy the exercise price, (C) by reducing the number of shares of Common Stock otherwise deliverable upon the exercise of the Stock Option by the number of shares of Common Stock having a Fair Market Value on the date of exercise equal to the exercise price, (D) by a combination of the methods described above or (E) by such other method as may be approved by the Committee and set forth in the Award Agreement. In accordance with Section 15.11 hereof, and in addition to and at the time of payment of the exercise price, the Participant shall pay to the Company the full amount of any and all applicable income tax, employment tax and other amounts required to be withheld in connection with such exercise, payable under such of the methods described above for the payment of the exercise price as may be approved by the Committee and set forth in the Award Agreement.

6.6 *Limited Transferability of Nonqualified Stock Options*. All Stock Options shall be nontransferable except (i) upon the Participant's death, in accordance with Section 15.3 hereof or (ii) in the case of Nonqualified Stock Options only, for the transfer of all or part of the Stock Option to a Participant's "family member" (as defined for purposes of the Form S-8 registration statement under the Securities Act), or as otherwise permitted by the Committee, in each case as may be approved by the Committee in its discretion at the time of proposed transfer. The transfer of a Nonqualified Stock Option may be subject to such terms and conditions as the Committee may in its discretion impose from time to time. Subsequent transfers of a Nonqualified Stock Option shall be prohibited other than in accordance with Section 15.3 hereof.

6.7 *Additional Rules for Incentive Stock Options*.

(a) *Eligibility*. An Incentive Stock Option may only be granted to an Eligible Person who is considered an employee for purposes of Treasury Regulation Section 1.421-1(h) with respect to the Company or any Subsidiary that qualifies as a "subsidiary corporation" with respect to the Company for purposes of Section 424(f) of the Code.

(b) *Annual Limits*. No Incentive Stock Option shall be granted to a Participant as a result of which the aggregate Fair Market Value (determined as of the Date of Grant) of the Common Stock with respect to which incentive stock options under Section 422 of the Code are exercisable for the first time in any calendar year under the Plan and any other stock option plans of the Company or any Subsidiary or parent corporation, would exceed $100,000, determined in accordance with Section 422(d) of the Code. This limitation shall be applied by taking Stock Options into account in the order in which granted. Any Stock Option grant that exceeds such limit shall be treated as a non-qualified stock option.

(c) *Additional Limitations*. In the case of any Incentive Stock Option granted to an Eligible Person who owns, either directly or indirectly (taking into account the attribution rules contained in Section 424(d) of the Code), stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Subsidiary, the exercise price shall not be less than one hundred ten percent (110%) of the Fair Market Value of a share of Common Stock on the Date of Grant and the maximum term shall be five (5) years.

(d) *Termination of Service*. An Award of an Incentive Stock Option may provide that such Stock Option may be exercised not later than (i) three (3) months following termination of Service of the Participant with the Company and all Subsidiaries (other than as set forth in clause (ii) of this Section 6.7(d)) or (ii) one year following termination of Service of the Participant with the Company and all Subsidiaries due to death or permanent and total disability within the meaning of Section 22(e)(3) of the Code, in each case as and to the extent determined by the Committee to comply with the requirements of Section 422 of the Code.

(e) *Other Terms and Conditions; Nontransferability*. Any Incentive Stock Option granted hereunder shall contain such additional terms and conditions, not inconsistent with the terms of the Plan, as are deemed necessary or desirable by the Committee, which terms, together with the terms of the Plan, shall be intended and interpreted to cause such Incentive Stock Option to qualify as an "incentive stock option" under Section 422 of the Code. A Stock Option that is granted as an Incentive Stock Option shall, to the extent it fails to qualify as an "incentive stock option" under the Code, be treated as a Nonqualified Stock Option. An Incentive Stock Option shall by its terms be nontransferable other than by will or by the laws of descent and distribution, and shall be exercisable during the lifetime of a Participant only by such Participant.

(f) *Disqualifying Dispositions*. If shares of Common Stock acquired by exercise of an Incentive Stock Option are disposed of within two years following the Date of Grant or one year following the transfer of such shares to the Participant upon exercise, the Participant shall, promptly following such disposition, notify the Company in writing of the date and terms of such disposition and provide such other information regarding the disposition as the Company may reasonably require.

6.8 *Repricing Prohibited.* Subject to the anti-dilution adjustment provisions contained in Section 4.5 hereof, without the prior approval of the Company's stockholders, neither the Committee nor the Board shall cancel a Stock Option when the exercise price per share exceeds the Fair Market Value of one share of Common Stock in exchange for cash or another Award (other than in connection with a Change of Control) or cause the cancellation, substitution or amendment of a Stock Option that would have the effect of reducing the exercise price of such a Stock Option previously granted under the Plan or otherwise approve any modification to such a Stock Option, that would be treated as a "repricing" under the then applicable rules, regulations or listing requirements adopted by the NASDAQ or other principal exchange on which the Common Stock is then listed.

6.9 *Dividend Equivalent Rights.* Dividends shall not be paid with respect to Stock Options. Dividend equivalent rights shall be granted with respect to the shares of Common Stock subject to Stock Options to the extent permitted by the Committee and set forth in the Award Agreement.

6.10 *No Rights as Stockholder*. The Participant shall not have any rights as a stockholder with respect to the shares underlying a Stock Option until such time as shares or Common Stock are delivered to the Participant pursuant to the terms of the Award Agreement.

7. Stock Appreciation Rights.

7.1 *Grant of Stock Appreciation Rights*. Stock Appreciation Rights may be granted to any Eligible Person selected by the Committee. Stock Appreciation Rights may be granted on a basis that allows for the exercise of the right by the Participant or that provides for the automatic payment of the right upon a specified date or event. Stock Appreciation Rights shall be non-transferable, except as provided in Section 15.3 hereof. All Stock Appreciation Rights granted under the Plan to U.S. taxpayers are intended to comply with or otherwise be exempt from the requirements of Section 409A of the Code.

7.2 *Stand-Alone and Tandem Stock Appreciation Rights*. A Stock Appreciation Right may be granted without any related Stock Option, or may be granted in tandem with a Stock Option, either on the Date of Grant or at any time thereafter during the term of the Stock Option. The Committee shall in its discretion provide in an Award Agreement the time or times at which or the conditions upon which, a Stock Appreciation Right or portion thereof shall become vested and/or exercisable. The requirements for vesting and exercisability of a Stock Appreciation Right may be based on the continued Service of a Participant with the Company or a Subsidiary for a specified time period (or periods), on the attainment of a specified Performance Goal(s) designed to meet the requirements for exemption under Section 162(m) of the Code and/or on such other terms and conditions as approved by the Committee in its discretion. If the vesting requirements of a Stock Appreciation Right are not satisfied, the Award shall be forfeited. A Stock Appreciation Right will be exercisable or payable at such time or times as determined by the Committee; provided, however, that the maximum term of a Stock Appreciation Right shall be ten (10) years from the Date of Grant. The Committee may provide that a Stock Appreciation Right will cease to be exercisable upon or at the end of a period following a termination of Service for any reason. The base price of a Stock Appreciation Right granted without any related Stock Option shall be determined by the Committee in its discretion; provided, however, that the base price per share of any such stand-alone Stock Appreciation Right shall not be less than one hundred percent (100%) of the Fair Market Value of a share of Common Stock on the Date of Grant.

7.3 *Payment of Stock Appreciation Rights*. A Stock Appreciation Right will entitle the holder, upon exercise or other payment of the Stock Appreciation Right, as applicable, to receive an amount determined by multiplying: (i) the excess of the Fair Market Value of a share of Common Stock on the date of exercise or payment of the Stock Appreciation Right over the base price of such Stock Appreciation Right, by (ii) the number of shares as to which such Stock Appreciation Right is exercised or paid. Payment of the amount determined under the foregoing may be made, as approved by the Committee and set forth in the Award Agreement, in shares of Common Stock valued at their Fair Market Value on the date of exercise or payment, in cash or in a combination of shares of Common Stock and cash, subject to applicable tax withholding requirements.

7.4 *Repricing Prohibited*. Subject to the anti-dilution adjustment provisions contained in Section 4.5 hereof, without the prior approval of the Company's stockholders, neither the Committee nor the Board shall cancel a Stock Appreciation Right when the base price per share exceeds the Fair Market Value of one share of Common Stock in exchange for cash or another Award (other than in connection with a Change of Control) or cause the cancellation, substitution or amendment of a Stock Appreciation Right that would have the effect of reducing the base price of such a Stock Appreciation Right previously granted under the Plan or otherwise approve any modification to such Stock Appreciation Right that would be treated as a "repricing" under the then applicable rules, regulations or listing requirements adopted by the NASDAQ or other principal exchange on which the Common Stock is then listed.

7.5 *Dividend Equivalent Rights.* Dividends shall not be paid with respect to Stock Appreciation Rights. Dividend equivalent rights shall be granted with respect to the shares of Common Stock subject to Stock Appreciation Rights to the extent permitted by the Committee and set forth in the Award Agreement.

8. Restricted Stock Awards.

8.1 *Grant of Restricted Stock Awards*. A Restricted Stock Award may be granted to any Eligible Person selected by the Committee. The Committee may require the payment by the Participant of a specified purchase price in connection with any Restricted Stock Award.

8.2 *Vesting Requirements*. The restrictions imposed on shares granted under a Restricted Stock Award shall lapse in accordance with the vesting requirements specified by the Committee in the Award Agreement. The requirements for vesting of a Restricted Stock Award may be based on the continued Service of the Participant with the Company or a Subsidiary for a specified time period (or periods), on the attainment of a specified Performance Goal(s) designed to meet the requirements for exemption under Section 162(m) of the Code and/or on such other terms and conditions as approved by the Committee in its discretion. If the vesting requirements of a Restricted Stock Award shall not be satisfied or, if applicable, the Performance Goal(s) with respect to such Restricted Stock Award are not attained, the Award shall be forfeited and the shares of Common Stock subject to the Award shall be returned to the Company.

8.3 *Transfer Restrictions*. Shares granted under any Restricted Stock Award may not be transferred, assigned or subject to any encumbrance, pledge or charge until all applicable restrictions are removed or have expired, except as provided in Section 15.3 hereof. Failure to satisfy any applicable restrictions shall result in the subject shares of the Restricted Stock Award being forfeited and returned to the Company. The Committee may require in an Award Agreement that certificates (if any) representing the shares granted under a Restricted Stock Award bear a legend making appropriate reference to the restrictions imposed, and that certificates (if any) representing the shares granted or sold under a Restricted Stock Award will remain in the physical custody of an escrow holder until all restrictions are removed or have expired.

8.4 *Rights as Stockholder*. Subject to the foregoing provisions of this Section 8 and the applicable Award Agreement, the Participant shall have all rights of a stockholder with respect to the shares granted to the Participant under a Restricted Stock Award, including the right to vote the shares and receive all dividends and other distributions paid or made with respect thereto, unless the Committee determines otherwise at the time the Restricted Stock Award is granted. The Committee may provide in an Award Agreement for the payment of dividends and distributions to the Participant at such times as paid to stockholders generally, at the times of vesting or other payment of the Restricted Stock Award or otherwise; provided that, dividends and other distributions made with respect to a Restricted Stock Award that is subject to performance-based vesting shall not be paid until, and only to the extent that the Award vests.

8.5 *Section 83(b) Election*. If a Participant makes an election pursuant to Section 83(b) of the Code with respect to a Restricted Stock Award, the Participant shall file, within thirty (30) days following the Date of Grant, a copy of such election with the Company and with the Internal Revenue Service, in accordance with the regulations under Section 83 of the Code. The Committee may provide in an Award Agreement that the Restricted Stock Award is conditioned upon the Participant's making or refraining from making an election with respect to the Award under Section 83(b) of the Code.

9. Restricted Stock Units.

9.1 *Grant of Restricted Stock Units*. A Restricted Stock Unit may be granted to any Eligible Person selected by the Committee. The value of each Restricted Stock Unit is equal to the Fair Market Value of a share of Common Stock on the applicable date or time period of determination, as specified by the Committee. Restricted Stock Units shall be subject to such restrictions and conditions as the Committee shall determine. In addition, a Restricted Stock Unit may be designated as a "Performance Stock Unit", the vesting requirements of which may be based, in whole or in part, on the attainment of pre-established business and/or individual Performance Goal(s) over a specified performance period designed to meet the requirements for exemption under Section 162(m) of the Code, or otherwise, as approved by the Committee in its discretion. Restricted Stock Units shall be non-transferable, except as provided in Section 15.3 hereof.

9.2 *Vesting of Restricted Stock Units*. The Committee shall, in its discretion, determine any vesting requirements with respect to Restricted Stock Units, which shall be set forth in the Award Agreement. The requirements for vesting of a Restricted Stock Unit may be based on the continued Service of the Participant with the Company or a Subsidiary for a specified time period (or periods) and/or on such other terms and conditions as approved by the Committee (including Performance Goal(s)) designed to meet the requirements for exemption under Section 162(m) of the Code and/or on such other terms and conditions as approved by the Committee in its discretion. If the vesting requirements of a Restricted Stock Unit Award are not satisfied, the Award shall be forfeited.

9.3 *Payment of Restricted Stock Units*. Restricted Stock Units shall become payable to a Participant at the time or times determined by the Committee and set forth in the Award Agreement, which may be upon or following the vesting of the Award. Payment of a Restricted Stock Unit may be made, as approved by the Committee and set forth in the Award Agreement,

in cash or in shares of Common Stock or in a combination thereof, subject to applicable tax withholding requirements. Any cash payment of a Restricted Stock Unit shall be made based upon the Fair Market Value of a share of Common Stock, determined on such date or over such time period as determined by the Committee.

9.4 *Dividend Equivalent Rights.* Restricted Stock Units may be granted together with a dividend equivalent right with respect to the shares of Common Stock subject to the Award, which may be accumulated and may be deemed reinvested in additional Restricted Stock Units or may be accumulated in cash, as determined by the Committee in its discretion. Any payments made pursuant to dividend equivalent rights will be paid at such times as determined by the Committee in its discretion (including without limitation at the times paid to stockholders generally or at the times of vesting or payment of the Restricted Stock Unit); provided that, dividends and other distributions made with respect to a Restricted Stock Unit that is subject to performance-based vesting shall not be paid until, and only to the extent that, the Award vests. Dividend equivalent rights may be subject to forfeiture under the same conditions as apply to the underlying Restricted Stock Units.

9.5 *No Rights as Stockholder*. The Participant shall not have any rights as a stockholder with respect to the shares subject to a Restricted Stock Unit until such time as shares of Common Stock are delivered to the Participant pursuant to the terms of the Award Agreement.

10. Cash Performance Awards and Performance Criteria.

10.1 *Grant of Cash Performance Awards*. A Cash Performance Award may be granted to any Eligible Person selected by the Committee. The maximum amount that may become payable to any one Participant during any one calendar year under all Cash Performance Awards intended to qualify as "performance-based compensation" under Section 162(m) of the Code is limited to $15,000,000. Each Cash Performance Award shall be evidenced by an Award Agreement that shall specify the performance period and such other terms and conditions as the Committee, in its discretion, shall determine. The Committee may accelerate the vesting of a Cash Performance Award upon a Change of Control or termination of Service under certain circumstances, as set forth in the Award Agreement. Cash Performance Awards shall be non-transferable, except as provided in Section 15.3 hereof.

10.2 *Payment*. Payment amounts may be based on the attainment of specified levels of the Performance Goals, including, if applicable, specified threshold, target and maximum performance levels, and performance falling between such levels. The requirements for payment may be also based upon the continued Service of the Participant with the Company or a Subsidiary during the respective performance period and on such other conditions as determined by the Committee and set forth in the Award Agreement. With respect to Cash Performance Awards, Performance Stock Units and other Awards intended to qualify as "performance-based compensation" under Section 162(m) of the Code, before the 90th day of the applicable performance period (or, if the performance period is less than one year, no later than the number of days which is equal to 25% of such performance period), the Committee will determine the duration of the performance period, the Performance Criteria, the applicable Performance Goals relating to the Performance Criteria, and the amount and terms of payment and/or vesting upon achievement of the Performance Goals.

10.3 *Performance Criteria*. For purposes of Cash Performance Awards, Performance Stock Units and other Awards intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the Performance Criteria shall be one or any combination of the following, for the Company or any identified Subsidiary or business unit, as determined by the Committee at the time of the Award: (i) net earnings; (ii) earnings per share; (iii) net debt; (iv) revenue or sales growth; (v) net or operating income; (vi) net operating profit; (vii) return measures (including, but not limited to, return on assets, capital, equity or sales); (viii) cash flow (including, but not limited to, operating cash flow, distributable cash flow and free cash flow); (ix) earnings before or after taxes, interest, depreciation, amortization and/or rent; (x) share price (including, but not limited to growth measures and total stockholder return); (xi) expense control or loss management; (xii) market share; (xiii) economic value added; (xiv) working capital; (xv) the formation of joint ventures or the completion of other corporate transactions; (xvi) gross or net profit margins; (xvii) revenue mix; (xviii) operating efficiency; (xix) product diversification; (xx) market penetration; (xxi) measurable achievement in quality, technology, operation or compliance initiatives; (xxii) quarterly dividends or distributions; (xxiii) employee retention or turnover; (xxiv) operating income before depreciation, amortization and certain additional adjustments to operating income permitted under our senior secured credit facilities; and/or (xxv) any combination of or a specified increase or decrease, as applicable in any of the foregoing. Each of the Performance Criteria shall be applied and interpreted in accordance with an objective formula or standard established by the Committee at the time the applicable Award is granted including, without limitation, GAAP (or adjusted GAAP, as applicable), consistently applied on a business unit, divisional, subsidiary or consolidated basis or any combination thereof. The Performance Goals may be described in terms of objectives that are related to the individual Participant or objectives that are Company-wide or related to a Subsidiary, division, department, region, function or business unit and may be measured on an absolute or cumulative basis or on the basis of percentage of improvement over time, and may be measured in terms of Company performance (or performance of the applicable Subsidiary, division, department, region, function or business unit) or measured relative to selected peer companies or a market or other index.

10.4 *Performance Goals*. For purposes of Cash Performance Awards, Performance Stock Units and other Awards intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the "Performance Goals" shall be the levels of achievement relating to the Performance Criteria selected by the Committee for the Award. The Performance Goals shall be written and shall be expressed as an objective formula or standard that precludes discretion to increase the amount of compensation payable that would otherwise be due upon attainment of the goal. The Performance Goals may be applied on an absolute basis or relative to an identified index, peer group, or one or more competitors or other companies (including particular business segments or divisions of such companies), as specified by the Committee. The Performance Goals need not be the same for all Participants.

10.5 *Adjustments*. At the time that an Award is granted, the Committee may provide for the Performance Goals or the manner in which performance will be measured against the Performance Goals to be adjusted in such objective manner as it deems appropriate, including, without limitation, adjustments to reflect charges for restructurings, non-operating income, the impact of corporate transactions or discontinued operations, events that are unusual in nature or infrequent in occurrence and other non-recurring items, currency fluctuations, litigation or claim judgements, settlements, and the cumulative effects of accounting or tax law changes. In

addition, to the extent not inconsistent with Section 162(m) of the Code, with respect to a Participant hired or promoted following the beginning of a performance period, the Committee may determine to prorate the Performance Goals and/or the amount of any payment in respect of such Participant's Cash Performance Awards for the partial performance period.

10.6 *Negative Discretion*. Notwithstanding anything else contained in the Plan to the contrary, in accordance with Section 162(m) of the Code, the Committee shall, to the extent provided in an Award Agreement, have the right, in its discretion, (i) to reduce or eliminate the amount otherwise payable to any Participant under an Award granted under this Section 10 and (ii) to establish rules or procedures that have the effect of limiting the amount payable to any Participant to an amount that is less than the amount that otherwise would be payable under an Award granted under this Section 10. The Committee may exercise such discretion in a non-uniform manner among Participants. The Committee shall not have discretion to increase the amount that otherwise would be payable to any Participant under a Cash Performance Award, Performance Stock Unit or other Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code.

10.7 *Certification*. Following the conclusion of the performance period of a Cash Performance Award, Performance Stock Unit or other Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the Committee shall certify in writing whether the Performance Goals for that performance period have been achieved, or certify the degree of achievement, if applicable.

10.8 *Payment*. Upon certification of the Performance Goals for a Cash Performance Award, Performance Stock Unit or other Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the Committee shall determine the level of vesting or amount of payment to the Participant pursuant to the Award, if any. Notwithstanding the foregoing, Cash Performance Awards may be paid, at the discretion of the Committee, in any combination of cash or shares of Common Stock, based upon the Fair Market Value of such shares at the time of payment.

11. Stock Awards.

11.1 *Grant of Stock Awards*. A Stock Award may be granted to any Eligible Person selected by the Committee. A Stock Award may be granted for past Services, in lieu of bonus or other cash compensation, as directors' compensation or for any other valid purpose as determined by the Committee. The Committee shall determine the terms and conditions of such Awards, and such Awards may be made without vesting requirements to the extent permissible under Section 5.2 hereof. In addition, the Committee may, in connection with any Stock Award, require the payment of a specified purchase price.

11.2 *Rights as Stockholder*. Subject to the foregoing provisions of this Section 11 and the applicable Award Agreement, upon the issuance of shares of Common Stock under a Stock Award the Participant shall have all rights of a stockholder with respect to the shares of Common Stock, including the right to vote the shares and receive all dividends and other distributions paid or made with respect thereto.

12. Change of Control.

12.1 *Effect on Awards*. Upon the occurrence of a Change of Control, unless otherwise provided in the Award Agreement, the Committee is authorized (but not obligated) to make adjustments in the terms and conditions of outstanding Awards, including without limitation the following (or any combination thereof): (a) continuation or assumption of such outstanding Awards under the Plan by the Company (if it is the surviving company or corporation) or by the surviving company or corporation or its parent; (b) substitution by the surviving company or corporation or its parent of awards with substantially the same terms for outstanding Awards (with appropriate adjustments to the type of consideration payable upon settlement of the Awards); (c) acceleration of exercisability, vesting and/or payment under outstanding Awards immediately prior to the occurrence of such event or upon a termination of Service following such event; and (d) if all or substantially all of the Company's outstanding shares of Common Stock are transferred in exchange for cash consideration in connection with such Change of Control: (i) upon written notice, provide that any outstanding Stock Options and Stock Appreciation Rights are exercisable during a reasonable period of time immediately prior to the scheduled consummation of the event or such other reasonable period as determined by the Committee (contingent upon the consummation of the event), and at the end of such period, such Stock Options and Stock Appreciation Rights shall terminate to the extent not so exercised within the relevant period; and (ii) cancel all or any portion of outstanding Awards for fair value (in the form of cash, shares of Common Stock, other property or any combination thereof) as determined in the sole discretion of the Committee; provided, however, that, in the case of Stock Options and Stock Appreciation Rights, the fair value may equal the excess, if any, of the value or amount of the consideration to be paid in the Change of Control transaction to holders of shares of Common Stock (or, if no such consideration is paid, Fair Market Value of the shares of Common Stock) over the aggregate exercise or base price, as applicable, with respect to such Awards or portion thereof being canceled, or if no such excess, zero; provided, further, that if any payments or other consideration are deferred and/or contingent as a result of escrows, earn outs, holdbacks or any other contingencies, payments under this provision may be made on substantially the same terms and conditions applicable to, and only to the extent actually paid to, the holders of Shares in connection with the Change of Control.

12.2 *Definition of Change of Control*. Unless otherwise defined in an Award Agreement, "*Change of Control*" shall mean the occurrence of one or more of the following events:

(a) Any Person becomes the Beneficial Owner, directly or indirectly, of more than fifty percent (50%) of the combined voting power, excluding any Excluded Persons or any person that is the Beneficial Owner, directly or indirectly, of more than fifty percent (50%) of the combined voting power on the Effective Date, of the then outstanding voting securities of the Company entitled to vote generally in the election of its directors (the "*Outstanding Company Voting Securities*") including by way of merger, consolidation or otherwise; provided, however, that for purposes of this definition, the following acquisitions shall not be taken into account in determining whether a Change of Control has occurred: (i) any acquisition of voting securities of the Company directly from the Company or (ii) any acquisition by the Company or any of its Subsidiaries of Outstanding Company Voting Securities, including an acquisition by any employee benefit plan or related trust sponsored or maintained by the Company, or any of its Subsidiaries.

(b) The following individuals (the "*Incumbent Directors*") cease for any reason to constitute a majority of the number of directors then serving on the Board: individuals who, on the Effective Date, constitute the Board and any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including, but not limited to, a consent or proxy solicitation, relating to the election of directors of the Company by or on behalf of a Person other than the Board) whose appointment or election by the Board or nomination for election by the Company's stockholders was approved or recommended by a vote of at least a majority of the directors then still in office who either were directors on the Effective Date or whose appointment, election or nomination for election was previously so approved or recommended.

(c) Consummation of a reorganization, merger, or consolidation to which the Company is a party or a sale or other disposition of all or substantially all of the assets of the Company (a "*Business Combination*"), unless, following such Business Combination: (i) any individuals and entities that were the Beneficial Owners of Outstanding Company Voting Securities immediately prior to such Business Combination are the Beneficial Owners, directly or indirectly, of more than fifty percent (50%) of the combined voting power of the outstanding voting securities entitled to vote generally in the election of directors (or election of members of a comparable governing body) of the entity resulting from the Business Combination (including, without limitation, an entity which as a result of such transaction owns all or substantially all of the Company or all or substantially all of the Company's assets either directly or through one or more Subsidiaries) (the "*Successor Entity*") in substantially the same proportions as their ownership immediately prior to such Business Combination; (ii) no Person (excluding any Successor Entity, any Excluded Person, any person that is the Beneficial Owner, directly or indirectly, of more than thirty percent (30%) of the combined voting power on the Effective Date or any employee benefit plan or related trust of the Company, such Successor Entity, or any of their Subsidiaries) is the Beneficial Owner, directly or indirectly, of more than thirty percent (30%) of the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors (or comparable governing body) of the Successor Entity, except to the extent that such ownership existed prior to the Business Combination; and (iii) at least a majority of the members of the board of directors (or comparable governing body) of the Successor Entity were Incumbent Directors (including persons deemed to be Incumbent Directors) at the time of the execution of the initial agreement or of the action of the Board providing for such Business Combination.

Notwithstanding the foregoing, to the extent necessary to comply with Section 409A of the Code with respect to the payment of "nonqualified deferred compensation," "Change of Control" shall be limited to a "change in control event" as defined under Section 409A of the Code.

13. Forfeiture Events.

13.1 *General*. The Committee may specify in an Award Agreement at the time of the Award that the Participant's rights, payments and benefits with respect to an Award are subject to reduction, cancellation, forfeiture or recoupment upon the occurrence of certain specified

events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events may include, without limitation, termination of Service for Cause, violation of material Company policies, breach of noncompetition, non-solicitation, confidentiality or other restrictive covenants that may apply to the Participant or other conduct by the Participant that is detrimental to the business or reputation of the Company.

13.2 *Termination for Cause*.

(a) *Treatment of Awards*. Unless otherwise provided by the Committee and set forth in an Award Agreement, if (i) a Participant's Service with the Company or any Subsidiary shall be terminated for Cause or (ii) after termination of Service for any other reason, the Committee determines in its discretion either that, (1) during the Participant's period of Service, the Participant engaged in an act which would have warranted termination of Service for Cause or (2) after termination, the Participant engaged in conduct that violated any continuing obligation or duty of the Participant in respect of the Company or any Subsidiary, such Participant's rights, payments and benefits with respect to an Award shall be subject to cancellation, forfeiture and/or recoupment, as provided in Section 13.3 below. The Company shall have the power to determine whether the Participant has been terminated for Cause, the date upon which such termination for Cause occurs, whether the Participant engaged an act which would have warranted termination of Service for Cause or engaged in conduct that violated any continuing obligation or duty of the Participant in respect of the Company or any Subsidiary. Any such determination shall be final, conclusive and binding upon all Persons. In addition, if the Company shall reasonably determine that a Participant has committed or may have committed any act which could constitute the basis for a termination of such Participant's Service for Cause or violates any continuing obligation or duty of the Participant in respect of the Company or any Subsidiary, the Company may suspend the Participant's rights to exercise any Stock Option or Stock Appreciation Right, receive any payment or vest in any right with respect to any Award pending a determination by the Company of whether an act or omission could constitute the basis for a termination for Cause as provided in this Section 13.2.

(b) *Definition of Cause*. Unless otherwise defined in an Award Agreement, "*Cause*" shall mean: (i) the Participant has committed a deliberate act against the interests of the Company including, without limitation: an act of fraud, embezzlement, misappropriation or breach of fiduciary duty against the Company, including, but not limited to, the offer, payment, solicitation or acceptance of any unlawful bribe or kickback with respect to the Company's business; or (ii) the commission by a Participant of, or the plea of nolo contendere by such Participant with respect to, a felony or a crime involving moral turpitude,; or (iii) the Participant has failed to perform or neglected the material duties incident to his employment or other engagement with the Company on a regular basis, and such refusal or failure shall have continued for a period of twenty (20) days after written notice to the Participant specifying such refusal or failure in reasonable detail; or (iv) the Participant has been chronically absent from work (excluding vacations, illnesses, Disability or leaves of absence approved by the Board); or (v) the Participant has refused, after explicit written notice, to obey any lawful resolution of or direction by the Board which is consistent with the duties incident to his employment or other engagement with the Company and such refusal continues for more than twenty (20) days after written notice is given to the Participant specifying such refusal in reasonable detail; or (vi) the Participant has breached any of the material terms contained in any employment agreement, non-

competition agreement, confidentiality agreement, restrictive covenants agreement or similar type of agreement to which such Participant is a party; or (vii) the Participant's misappropriation of the Company's or any of its Subsidiary's assets or business opportunities; or (viii) the Participant has engaged in (x) the unlawful use (including being under the influence) or possession of illegal drugs on the Company's premises or (y) habitual drunkenness on the Company's premises.

Any voluntary termination of Service or other engagement by the Participant in anticipation of an involuntary termination of the Participant's Service for Cause shall be deemed to be a termination for "Cause." Notwithstanding the foregoing, in the event that a Participant is party to an employment, severance or similar agreement with the Company or any of its affiliates and such agreement contains a definition of "Cause," the definition of "Cause" set forth above shall be deemed replaced and superseded, with respect to such Participant, by the definition of "Cause" used in such employment, severance or similar agreement.

13.3 *Right of Recapture*.

(a) *General*. If at any time within one (1) year (or such longer time specified in an Award Agreement or other agreement with a Participant or policy applicable to the Participant) after the date on which a Participant exercises a Stock Option or Stock Appreciation Right or on which a Stock Award, Restricted Stock Award or Restricted Stock Unit vests or becomes payable or on which a Cash Performance Award is paid to a Participant, or on which income otherwise is realized by a Participant in connection with an Award, (i) a Participant's Service is terminated for Cause, (ii) the Committee determines in its discretion that the Participant is subject to any recoupment of benefits pursuant to the Company's compensation recovery, "clawback" or similar policy, as may be in effect from time to time, or (iii) after a Participant's Service terminates for any other reason, the Committee determines in its discretion either that, (1) during the Participant's period of Service, the Participant engaged in an act or omission which would have warranted termination of the Participant's Service for Cause or (2) after a Participant's termination of Service, the Participant engaged in conduct that materially violated any continuing obligation or duty of the Participant in respect of the Company or any Subsidiary, then, at the sole discretion of the Committee, any gain realized by the Participant from the exercise, vesting, payment or other realization of income by the Participant in connection with an Award, shall be paid by the Participant to the Company upon notice from the Company, subject to applicable law. Such gain shall be determined as of the date or dates on which the gain is realized by the Participant, without regard to any subsequent change in the Fair Market Value of a share of Common Stock. To the extent not otherwise prohibited by law, the Company shall have the right to offset such gain against any amounts otherwise owed to the Participant by the Company (whether as wages, vacation pay or pursuant to any benefit plan or other compensatory arrangement).

(b) *Accounting Restatement*. If a Participant receives compensation pursuant to an Award under the Plan (whether a Stock Option, Cash Performance Award or otherwise) based on financial statements that are subsequently required to be restated in a way that would decrease the value of such compensation, the Participant will, to the extent not otherwise prohibited by law, upon the written request of the Company, forfeit and repay to the Company the difference between what the Participant received and what the Participant should have

received based on the accounting restatement, in accordance with (i) the Company's compensation recovery, "clawback" or similar policy, as may be in effect from time to time and (ii) any compensation recovery, "clawback" or similar policy made applicable by law including the provisions of Section 945 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the rules, regulations and requirements adopted thereunder by the Securities and Exchange Commission and/or any national securities exchange on which the Company's equity securities may be listed (the "*Policy*"). By accepting an Award hereunder, the Participant acknowledges and agrees that the Policy shall apply to such Award, and all incentive-based compensation payable pursuant to such Award shall be subject to forfeiture and repayment pursuant to the terms of the Policy.

14. Transfer, Leave of Absence, Etc. For purposes of the Plan, except as otherwise determined by the Committee, the following events shall not be deemed a termination of Service: (a) a transfer to the employment of the Company from a Subsidiary or from the Company to a Subsidiary, or from one Subsidiary to another; or (b) an approved leave of absence for military service or sickness, a leave of absence where the employee's right to re-employment is guaranteed either by a statute or by contract or under the policy pursuant to which the leave of absence was granted, a leave of absence for any other purpose approved by the Company or if the Committee otherwise so provides in writing.

15. General Provisions.

15.1 *Status of Plan.* The Committee may authorize the creation of trusts or other arrangements to meet the Company's obligations to deliver shares of Common Stock or make payments with respect to Awards.

15.2 *Award Agreement.* An Award under the Plan shall be evidenced by an Award Agreement in a written or electronic form approved by the Committee setting forth the number of shares of Common Stock or Restricted Stock Units subject to the Award, the exercise price, base price or purchase price of the Award, the time or times at which an Award will become vested, exercisable or payable and the term of the Award. The Award Agreement also may set forth the effect on an Award of a Change of Control and/or a termination of Service under certain circumstances. The Award Agreement shall be subject to and incorporate, by reference or otherwise, all of the applicable terms and conditions of the Plan, and also may set forth other terms and conditions applicable to the Award as determined by the Committee consistent with the limitations of the Plan. The grant of an Award under the Plan shall not confer any rights upon the Participant holding such Award other than such terms, and subject to such conditions, as are specified in the Plan as being applicable to such type of Award (or to all Awards) or as are expressly set forth in the Award Agreement. The Committee need not require the execution of an Award Agreement by a Participant, in which case, acceptance of the Award by the Participant shall constitute agreement by the Participant to the terms, conditions, restrictions and limitations set forth in the Plan and the Award Agreement as well as the administrative guidelines of the Company in effect from time to time. In the event of any conflict between the provisions of the Plan and any Award Agreement, the provisions of the Plan shall prevail.

15.3 *No Assignment or Transfer; Beneficiaries*. Except as provided in Section 6.6 hereof or as otherwise determined by the Committee, Awards under the Plan shall not be assignable or transferable by the Participant, and shall not be subject in any manner to assignment, alienation, pledge, encumbrance or charge. Notwithstanding the foregoing, in the event of the death of a Participant, except as otherwise provided by the Committee in an Award Agreement, an outstanding Award may be exercised by or shall become payable to the Participant's beneficiary as determined under the Company 401(k) Retirement Plan or other applicable retirement or pension plan (the "*Retirement Plan*"). In lieu of such determination, a Participant may, from time to time, name any beneficiary or beneficiaries to receive any benefit in case of the Participant's death before the Participant receives any or all of such benefit. Each such designation shall revoke all prior designations by the same Participant and will be effective only when filed by the Participant in writing (in such form or manner as may be prescribed by the Committee) with the Company during the Participant's lifetime. In the absence of a valid designation under the Retirement Plan or as provided above, if no validly designated beneficiary survives the Participant or if each surviving validly designated beneficiary is legally impaired or prohibited from receiving the benefits under an Award, the Participant's beneficiary shall be the legatee or legatees of such Award designated under the Participant's last will or by such Participant's executors, personal representatives or distributees of such Award in accordance with the Participant's will or the laws of descent and distribution. The Committee may provide in the terms of an Award Agreement or in any other manner prescribed by the Committee that the Participant shall have the right to designate a beneficiary or beneficiaries who shall be entitled to any rights, payments or other benefits specified under an Award following the Participant's death.

15.4 *Deferrals of Payment*. The Committee may in its discretion permit a Participant to defer the receipt of payment of cash or delivery of shares of Common Stock that would otherwise be due to the Participant by virtue of the exercise of a right or the satisfaction of vesting or other conditions with respect to an Award; provided, however, that such discretion shall not apply in the case of a Stock Option or Stock Appreciation Right. If any such deferral is to be permitted by the Committee, the Committee shall establish rules and procedures relating to such deferral in a manner intended to comply with the requirements of Section 409A of the Code, including, without limitation, the time when an election to defer may be made, the time period of the deferral and the events that would result in payment of the deferred amount, the interest or other earnings attributable to the deferral and the method of funding, if any, attributable to the deferred amount.

15.5 *No Right to Employment or Continued Service*. Nothing in the Plan, in the grant of any Award or in any Award Agreement shall confer upon any Eligible Person or any Participant any right to continue in the Service of the Company or any of its Subsidiaries or interfere in any way with the right of the Company or any of its Subsidiaries to terminate the employment or other service relationship of an Eligible Person or a Participant for any reason or no reason at any time.

15.6 *Rights as Stockholder*. A Participant shall have no rights as a holder of shares of Common Stock with respect to any unissued securities covered by an Award until the date the Participant becomes the holder of record of such securities. Except as provided in Section 4.5 hereof, no adjustment or other provision shall be made for dividends or other stockholder rights, except to the extent that the Award Agreement provides for dividend payments or dividend equivalent rights. The Committee may determine in its discretion the manner of delivery of

Common Stock to be issued under the Plan, which may be by delivery of stock certificates, electronic account entry into new or existing accounts or any other means as the Committee, in its discretion, deems appropriate. The Committee may require that the stock certificates (if any) be held in escrow by the Company for any shares of Common Stock or cause the shares to be legended in order to comply with the securities laws or other applicable restrictions or should the shares of Common Stock be represented by book or electronic account entry rather than a certificate, the Committee may take such steps to restrict transfer of the shares of Common Stock as the Committee considers necessary or advisable.

15.7 *Trading Policy and Other Restrictions*. Transactions involving Awards under the Plan shall be subject to the Company's Insider Trading and Regulation FD Policy and other restrictions, terms and conditions, to the extent established by the Committee or by applicable law, including any other applicable policies set by the Committee, from time to time.

15.8 *Section 409A Compliance*. To the extent applicable, it is intended that the Plan and all Awards hereunder comply with, or be exempt from, the requirements of Section 409A of the Code and the Treasury Regulations and other guidance issued thereunder, and that the Plan and all Award Agreements shall be interpreted and applied by the Committee in a manner consistent with this intent in order to avoid the imposition of any additional tax under Section 409A of the Code. In the event that any (i) provision of the Plan or an Award Agreement, (ii) Award, payment, transaction or (iii) other action or arrangement contemplated by the provisions of the Plan is determined by the Committee to not comply with the applicable requirements of Section 409A of the Code and the Treasury Regulations and other guidance issued thereunder, the Committee shall have the authority to take such actions and to make such changes to the Plan or an Award Agreement as the Committee deems necessary to comply with such requirements; provided, however, that no such action shall adversely affect any outstanding Award without the consent of the affected Participant. No payment that constitutes deferred compensation under Section 409A of the Code that would otherwise be made under the Plan or an Award Agreement upon a termination of Service will be made or provided unless and until such termination is also a "separation from service," as determined in accordance with Section 409A of the Code. Notwithstanding the foregoing or anything elsewhere in the Plan or an Award Agreement to the contrary, if a Participant is a "specified employee" as defined in Section 409A of the Code at the time of termination of Service with respect to an Award, then solely to the extent necessary to avoid the imposition of any additional tax under Section 409A of the Code, the commencement of any payments or benefits under the Award shall be deferred until the date that is six (6) months plus one (1) day following the date of the Participant's termination of Service or, if earlier, the Participant's death (or such other period as required to comply with Section 409A). In no event whatsoever shall the Company be liable for any additional tax, interest or penalties that may be imposed on a Participant by Section 409A of the Code or any damages for failing to comply with Section 409A of the Code.

15.9 *Securities Law Compliance*. No shares of Common Stock will be issued or transferred pursuant to an Award unless and until all then applicable requirements imposed by Federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any exchanges upon which the shares of Common Stock may be listed, have been fully met. As a condition precedent to the issuance of shares of Common Stock pursuant to the grant or exercise of an Award, the Company may require the Participant to take

any reasonable action that the Company determines is necessary or advisable to meet such requirements. The Committee may impose such conditions on any shares of Common Stock issuable under the Plan as it may deem advisable, including, without limitation, restrictions under the Securities Act under the requirements of any exchange upon which such shares of the same class are then listed, and under any blue sky or other securities laws applicable to such shares. The Committee may also require the Participant to represent and warrant at the time of issuance or transfer that the shares of Common Stock are being acquired solely for investment purposes and without any current intention to sell or distribute such shares.

15.10 *Substitute Awards in Corporate Transactions*. Nothing contained in the Plan shall be construed to limit the right of the Committee to grant Awards under the Plan in connection with the acquisition, whether by purchase, merger, consolidation or other corporate transaction, of the business or assets of any corporation or other entity. Without limiting the foregoing, the Committee may grant Awards under the Plan to an employee or director of another corporation who becomes an Eligible Person by reason of any such corporate transaction in substitution for awards previously granted by such corporation or entity to such person. The terms and conditions of the substitute Awards may vary from the terms and conditions that would otherwise be required by the Plan solely to the extent the Committee deems necessary for such purpose. Any such substitute awards shall not reduce the Share Reserve; provided, however, that such treatment is permitted by applicable law and the listing requirements of the NASDAQ or other exchange or securities market on which the Common Stock is listed.

15.11 *Tax Withholding*. The Participant shall be responsible for payment of any taxes or similar charges required by law to be paid or withheld from an Award or an amount paid in satisfaction of an Award. Any required withholdings shall be paid by the Participant on or prior to the payment or other event that results in taxable income in respect of an Award. The Award Agreement may specify the manner in which the withholding obligation shall be satisfied with respect to the particular type of Award, which may include permitting the Participant to elect to satisfy the withholding obligation by tendering shares of Common Stock to the Company or having the Company withhold a number of shares of Common Stock having a value equal to the minimum statutory tax or as otherwise specified in an Award Agreement, or similar charge required to be paid or withheld.

15.12 *Unfunded Plan*. The adoption of the Plan and any reservation of shares of Common Stock or cash amounts by the Company to discharge its obligations hereunder shall not be deemed to create a trust or other funded arrangement. Except upon the issuance of shares of Common Stock pursuant to an Award, any rights of a Participant under the Plan shall be those of a general unsecured creditor of the Company, and neither a Participant nor the Participant's permitted transferees or estate shall have any other interest in any assets of the Company by virtue of the Plan. Notwithstanding the foregoing, the Company shall have the right to implement or set aside funds in a grantor trust, subject to the claims of the Company's creditors or otherwise, to discharge its obligations under the Plan.

15.13 *Other Compensation and Benefit Plans*. The adoption of the Plan shall not affect any other share incentive or other compensation plans in effect for the Company or any Subsidiary, nor shall the Plan preclude the Company from establishing any other forms of share incentive or other compensation or benefit program for employees of the Company or any

Subsidiary. The amount of any compensation deemed to be received by a Participant pursuant to an Award shall not constitute includable compensation for purposes of determining the amount of benefits to which a Participant is entitled under any other compensation or benefit plan or program of the Company or a Subsidiary, including, without limitation, under any pension or severance benefits plan, except to the extent specifically provided by the terms of any such plan.

15.14 *Plan Binding on Transferees*. The Plan shall be binding upon the Company, its transferees and assigns, and the Participant, the Participant's executor, administrator and permitted transferees and beneficiaries.

15.15 *Severability*. If any provision of the Plan or any Award Agreement shall be determined to be illegal or unenforceable by any court of law in any jurisdiction, the remaining provisions hereof and thereof shall be severable and enforceable in accordance with their terms, and all provisions shall remain enforceable in any other jurisdiction.

15.16 *Governing Law; Jurisdiction*. The Plan and all rights hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, without reference to the principles of conflicts of laws, and to applicable federal laws. Any action to enforce any of the provisions of the Plan or any Award Agreement shall be brought in a court in the State of Texas located in Harris County or, if subject matter jurisdiction exists, in the Houston Division of the U.S. District Court for the Southern District of Texas. The Company and any Participant consent to the jurisdiction of such courts and to the service of process in any manner provided by applicable Texas or federal law. Each party irrevocably waives any objection which it may now or hereafter have to the laying of the venue of any such suit, action, or proceeding brought in such court and any claim that such suit, action, or proceeding brought in such court has been brought in an inconvenient forum and agrees that service of process in accordance with the foregoing sentences shall be deemed in every respect effective and valid personal service of process upon such party.

15.17 *No Fractional Shares*. No fractional shares of Common Stock shall be issued or delivered pursuant to the Plan or any Award, and the Committee shall determine whether cash, other securities or other property shall be paid or transferred in lieu of any fractional shares of Common Stock or whether such fractional shares or any rights thereto shall be canceled, terminated or otherwise eliminated.

15.18 *No Guarantees Regarding Tax Treatment*. Neither the Company nor the Committee make any guarantees to any person regarding the tax treatment of Awards or payments made under the Plan. Neither the Company nor the Committee has any obligation to take any action to prevent the assessment of any tax on any person with respect to any Award under Section 409A of the Code, Section 4999 of the Code or otherwise and neither the Company nor the Committee shall have any liability to a person with respect thereto.

15.19 *Data Protection*. By participating in the Plan, each Participant consents to the collection, processing, transmission and storage by the Company, its Subsidiaries and any third party administrators of any data of a professional or personal nature for the purposes of administering the Plan.

15.20 *Awards to Non-U.S. Participants.* To comply with the laws in countries other than the United States in which the Company or any of its Subsidiaries or affiliates operates or has employees, Non-Employee Directors or consultants, the Committee, in its sole discretion, shall have the power and authority to (i) modify the terms and conditions of any Award granted to Participants outside the United States to comply with applicable foreign laws, (ii) take any action, before or after an Award is made, that it deems advisable to obtain approval or comply with any necessary local government regulatory exemptions or approvals and (iii) establish subplans and modify exercise procedures and other terms and procedures, to the extent such actions may be necessary or advisable. Any subplans and modifications to Plan terms and procedures established under this Section 15.20 by the Committee shall be attached to this Plan document as appendices.

16. Term; Amendment and Termination; Stockholder Approval.

16.1 *Term*. The Plan shall be effective as of the date of its approval by the stockholders of the Company (the "*Effective Date*"). Subject to Section 16.2 hereof, the Plan shall terminate on the tenth anniversary of the Effective Date.

16.2 *Amendment and Termination*. The Board may from time to time and in any respect, amend, modify, suspend or terminate the Plan; provided, however, that no amendment, modification, suspension or termination of the Plan shall materially and adversely affect any Award theretofore granted without the consent of the Participant or the permitted transferee of the Award. The Board may seek the approval of any amendment, modification, suspension or termination by the Company's stockholders to the extent it deems necessary in its discretion for purposes of compliance with Section 162(m) or Section 422 of the Code or for any other purpose, and shall seek such approval to the extent it deems necessary in its discretion to comply with applicable law or listing requirements of the NASDAQ or other exchange or securities market. Notwithstanding the foregoing, the Board shall have broad authority to amend the Plan or any Award under the Plan without the consent of a Participant to the extent it deems necessary or desirable in its discretion to comply with, take into account changes in, or interpretations of, applicable tax laws, securities laws, employment laws, accounting rules and other applicable laws, rules and regulations.

16.3 *Re-Approval of Performance Criteria*. At the discretion of the Board, for purposes of compliance with Section 162(m) of the Code, the Company may seek approval by the Company's stockholders of the Performance Criteria (or other designated performance goals) and such other provisions as determined by the Board no later than the annual general meeting of stockholders in the third year following the year in which an initial public offering first occurs.

Exhibit 10.6

FORM OF DIRECTOR INDEMNIFICATION AGREEMENT

THIS INDEMNIFICATION AGREEMENT (the "Agreement") is made and entered into as of [●] between NCS Multistage Holdings, Inc., a Delaware corporation (the "Company"), and [●] ("Indemnitee"). Capitalized terms not defined elsewhere in this Agreement are used as defined in Section 13.

WHEREAS, highly competent persons have become more reluctant to serve corporations as directors or officers or in other capacities unless they are provided with adequate protection through insurance or adequate indemnification against inordinate risks of claims and actions against them arising out of their service to and activities on behalf of the corporation;

WHEREAS, the Board of Directors of the Company (the "Board") has determined that, in order to attract and retain qualified individuals, the Company will attempt to maintain on an ongoing basis, at its sole expense, liability insurance to protect persons serving the Company and its subsidiaries from certain liabilities. Although the furnishing of such insurance has been a customary and widespread practice among United States-based corporations and other business enterprises, the Company believes that, given current market conditions and trends, such insurance may be available to it in the future only at higher premiums and with more exclusions. At the same time, directors, officers, and other persons in service to corporations or business enterprises are being increasingly subjected to expensive and time-consuming litigation relating to, among other things, matters that traditionally would have been brought only against the Company or business enterprise itself. The certificate of incorporation of the Company (as amended, the "Charter") requires indemnification of the directors of the Company. Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware ("DGCL"). The Charter and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the board of directors, officers and other persons with respect to indemnification;

WHEREAS, the uncertainties relating to such insurance and to indemnification have increased the difficulty of attracting and retaining such persons;

WHEREAS, the Board has determined that the increased difficulty in attracting and retaining such persons is detrimental to the best interests of the Company's stockholders and that the Company should act to assure such persons that there will be increased certainty of such protection in the future;

WHEREAS, it is reasonable, prudent and necessary for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law so that they will serve or continue to serve the Company free from undue concern that they will not be so indemnified;

WHEREAS, this Agreement is a supplement to and in furtherance of the Charter of the Company and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; and

WHEREAS, Indemnitee does not regard the protection available under the Company's Charter and insurance as adequate in the present circumstances, and may not be willing to serve as a director without adequate protection, and the Company desires Indemnitee to serve in such capacity. Indemnitee is willing to serve, continue to serve and to take on additional service for or on behalf of the Company on the condition that he be so indemnified; and

[WHEREAS, Indemnitee has certain rights to indemnification and/or insurance provided by Advent International Corporation ("Advent") which Indemnitee and Advent intends to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided herein, with the Company's acknowledgement and agreement to the foregoing being a material condition to Indemnitee's willingness to serve on the Board.]

NOW, THEREFORE, in consideration of Indemnitee's agreement to serve as a director from and after the date hereof, the parties hereto agree as follows:

1. Indemnity of Indemnitee. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent permitted by law, as such may be amended from time to time. In furtherance of the foregoing indemnification, and without limiting the generality thereof:

(a) Proceedings Other Than Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section l(a) if, by reason of his Corporate Status, Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him, or on his behalf, in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful.

(b) Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of his Corporate Status, Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee, or on Indemnitee's behalf, in connection with such Proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.

(c) Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, he shall be indemnified to the maximum extent permitted by law, as such may be amended from time to time, against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or on his behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section 1(c) and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

2. Additional Indemnity. In addition to, and without regard to any limitations on, the indemnification provided for in Section 1 of this Agreement, the Company shall and hereby does indemnify and hold harmless Indemnitee against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf if, by reason of his Corporate Status, he is, or is threatened to be made, a party to or participant in any Proceeding (including a Proceeding by or in the right of the Company), including, without limitation, all liability arising out of the negligence or active or passive wrongdoing of Indemnitee. The only limitation that shall exist upon the Company's obligations pursuant to this Agreement shall be that the Company shall not be obligated to make any payment to Indemnitee that is finally determined (under the procedures, and subject to the presumptions, set forth in Sections 6 and 7 hereof) to be unlawful.

3. Contribution.

(a) Whether or not the indemnification provided in Sections 1 and 2 hereof is available, in respect of any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall pay, in the first instance, the entire amount of any judgment or settlement of such action, suit or proceeding without requiring Indemnitee to contribute to such payment and the Company hereby waives and relinquishes any right of contribution it may have against Indemnitee. The Company shall not, without the Indemnitee's prior written consent, enter into any such settlement of any action, suit or proceeding (in whole or in part) unless such settlement (i) provides for a full and final release of all claims asserted against Indemnitee and (ii) does not impose any Expense, judgment, fine, penalty or limitation on Indemnitee.

(b) Without diminishing or impairing the obligations of the Company set forth in the preceding subparagraph, if, for any reason, Indemnitee shall elect or be required to pay all or any portion of any judgment or settlement in any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall contribute to the amount of Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly

liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction from which such action, suit or proceeding arose; provided, however, that the proportion determined on the basis of relative benefit may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other equitable considerations which the Law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and the degree to which their conduct is active or passive.

(c) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution which may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

(d) To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

4. Indemnification for Expenses of a Witness. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a witness, or is made (or asked to) respond to discovery requests, in any Proceeding to which Indemnitee is not a party, he shall be indemnified against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith.

5. Advancement of Expenses. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within thirty (30) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 5 shall be unsecured and interest free.

6. Procedures and Presumptions for Determination of Entitlement to Indemnification. It is the intent of this Agreement to secure for Indemnitee rights of indemnity that are as favorable as may be permitted under the DGCL and public policy of the State of Delaware. Accordingly, the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board of Directors in writing that Indemnitee has requested indemnification. Notwithstanding the foregoing, any failure of Indemnitee to provide such a request to the Company, or to provide such a request in a timely fashion, shall not relieve the Company of any liability that it may have to Indemnitee unless, and to the extent that, such failure actually and materially prejudices the interests of the Company.

(b) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 6(a) hereof, a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following four methods, which shall be at the election of the Board of Directors: (1) by a majority vote of the Disinterested Directors, even though less than a quorum, (2) by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum, (3) if there are no Disinterested Directors, or if the Disinterested Directors so direct, by Independent Counsel in a written opinion to the Board of Directors, a copy of which shall be delivered to Indemnitee, or (4) if so directed by the Board of Directors, by the stockholders of the Company; provided, however, that if a Change in Control has occurred, the determination with respect to Indemnitee's entitlement to indemnification shall be made by Independent Counsel.

(c) In the event the determination of entitlement to indemnification is to be made by Independent Counsel, the Independent Counsel shall be selected as provided in this Section 6(c). If a Change in Control has not occurred, the Independent Counsel shall be selected by the Board of Directors (including a vote of a majority of the Disinterested Directors, if obtainable), and the Company shall give written notice to the Indemnitee advising him of the identity of the Independent Counsel so selected. Indemnitee may, within 10 days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 13 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is

withdrawn or a court has determined that such objection is without merit. If a Change in Control has occurred, the Independent Counsel shall be selected by the Indemnitee (unless the Indemnitee shall request that such selection be made by the Board of Directors, in which event the preceding sentence shall apply), and approved by the Board of Directors (which approval shall not be unreasonably withheld). If (i) an Independent Counsel is to make the determination of entitlement pursuant to this Section 6, and (ii) within 20 days after submission by Indemnitee of a written request for indemnification pursuant to Section 6(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court of Chancery of the State of Delaware or other court of competent jurisdiction for resolution of any objection which shall have been made by Indemnitee to the Company's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 6(b) hereof. The Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent Counsel in connection with acting pursuant to Section 6(b) hereof, and the Company shall pay all reasonable fees and expenses incident to the procedures of this Section 6(c), regardless of the manner in which such Independent Counsel was selected or appointed.

(d) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence. Neither the failure of the Company (including by its directors or independent legal counsel) to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Company (including by its directors or independent legal counsel) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

(e) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise, including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 6(e) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(f) If the person, persons or entity empowered or selected under this Section 6 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within sixty (60) days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law; provided, however, that such 60-day period may be extended for a reasonable time, not to exceed an additional thirty (30) days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information relating thereto; and provided, further, that the foregoing provisions of this Section 6(f) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 6(b) of this Agreement and if (A) within fifteen (15) days after receipt by the Company of the request for such determination, the Board of Directors or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy-five (75) days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within fifteen (15) days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty (60) days after having been so called and such determination is made thereat.

(g) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board of Directors or stockholder of the Company shall act reasonably and in good faith in making a determination regarding Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(h) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(i) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that

Indemnitee did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his conduct was unlawful.

7. Remedies of Indemnitee.

(a) In the event that (i) a determination is made pursuant to Section 6 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 5 of this Agreement, (iii) no determination of entitlement to indemnification is made pursuant to Section 6(b) of this Agreement within 90 days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to this Agreement within ten (10) days after receipt by the Company of a written request therefor or (v) payment of indemnification is not made within ten (10) days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 6 of this Agreement, Indemnitee shall be entitled to an adjudication in an appropriate court of the State of Delaware, or in any other court of competent jurisdiction, of Indemnitee's entitlement to such indemnification, contribution or advancement of Expenses. Alternatively, Indemnitee, at his option, may seek an award in arbitration to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. Except as set forth herein, the provisions of Delaware law (without regard to its conflict of law rules) shall apply to any such arbitration. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration.

(b) In the event that a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 7 shall be conducted in all respects as a de novo trial, or arbitration, on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 6(b). In any judicial proceeding or arbitration commenced pursuant to this Section 7, Indemnitee shall be presumed to be entitled to indemnification under this Agreement and the Company shall have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be, and the Company may not refer to or introduce into evidence any determination pursuant to Section 6(b) of this Agreement adverse to Indemnitee for any purpose. If Indemnitee commences a judicial proceeding or arbitration pursuant to this Section 7, Indemnitee shall not be required to reimburse the Company for any advances pursuant to Section 5 until a final determination is made with respect to Indemnitee's entitlement to indemnification (as to which all rights of appeal have been exhausted or lapsed).

(c) If a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 7, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's misstatement not materially misleading in connection with the application for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) In the event that Indemnitee, pursuant to this Section 7, seeks a judicial adjudication of his rights under, or to recover damages for breach of, this Agreement, or to recover under any directors' and officers' liability insurance policies maintained by the Company, the Company shall pay on his behalf, in advance, any and all expenses (of the types described in the definition of Expenses in Section 13 of this Agreement) actually and reasonably incurred by him in such judicial adjudication, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of expenses or insurance recovery.

(e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 7 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. The Company shall indemnify Indemnitee against any and all Expenses and, if requested by Indemnitee, shall (within ten (10) days after receipt by the Company of a written request therefore) advance, to the extent not prohibited by law, such expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advance of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of Expenses or insurance recovery, as the case may be.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding.

8. Non-Exclusivity; Survival of Rights; Insurance; Primacy of Indemnification; Subrogation.

(a) The rights of indemnification and to receive advancement of expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Certificate of Incorporation, the By-laws, any agreement, a vote of stockholders, a resolution of directors or otherwise, of the Company. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in the DGCL, whether by statute or judicial decision, permits greater indemnification than would be afforded currently under the Certificate of Incorporation, By-laws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) The Company shall obtain and maintain in effect during the entire period for which the Company is obligated to indemnify Indemnitee under this Agreement, one or more policies of insurance with reputable insurance companies to provide the directors of the Company with coverage for losses from wrongful acts and omissions and to ensure the Company's performance of its indemnification obligations under this Agreement. Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such officer or director under such policy or policies. In all such insurance policies, Indemnitee shall be named as an insured in such a manner as to provide Indemnitee with the same rights and benefits as are accorded to the most favorably insured of the Company's directors and officers. At the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(c) [The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses and/or insurance provided by Advent and certain affiliates that, directly or indirectly, (i) are controlled by, (ii) control or (iii) are under common control with, Advent (collectively, the "Fund Indemnitors"). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Certificate of Incorporation or By-laws of the Company (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors, and, (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third party beneficiaries of the terms of this Section 8(d).]

(d) [Except as provided in Section 8(c) above,] in the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee [(other than against the Fund Indemnitors)], who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(e) [Except as provided in Section 8(c) above,] the Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under any insurance policy, contract, agreement or otherwise.

(f) [Except as provided in Section 8(c)] above, the Company's obligation to indemnify or advance Expenses hereunder to Indemnitee who is or was serving at the request of the Company as a director, officer, employee or agent of any other corporation, partnership, joint venture, trust, employee benefit plan or other Enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise.

9. Exception to Right of Indemnification. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any claim made against Indemnitee:

(a) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision[; provided, that the foregoing shall not affect the rights of Indemnitee or the Fund Indemnitors set forth in Section 8(c) above]; or

(b) for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Exchange Act or similar provisions of state statutory law or common law; or

(c) for reimbursement to the Company of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company in each case as required under the Exchange Act; or

(d) in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees, unless (i) the Company has joined in or the Board of Directors of the Company authorized the Proceeding (or any part of any Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, or (iii) the Proceeding is one to enforce Indemnitee's rights under this Agreement.

10. Non-Disclosure of Payments. Except as expressly required by the securities laws of the United States of America, neither party shall disclose any payments under this Agreement unless prior approval of the other party is obtained. If any payment information must be disclosed, the Company shall afford the Indemnitee an opportunity to review all such disclosures and, if requested, to explain in such statement any mitigating circumstances regarding the events to be reported.

11. Duration of Agreement. All agreements and obligations of the Company contained herein shall continue upon the later of (a) ten (10) years after the date that Indemnitee shall have ceased to serve as a director of the Company or a director, officer, trustee, partner, managing member, fiduciary, employee or agent of any other corporation, partnership, joint venture, trust, employee benefit plan or other Enterprise which Indemnitee served at the request of the Company; or (b) one (1) year after the final termination of any Proceeding (including any rights of appeal thereto) in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any Proceeding commenced by Indemnitee pursuant to Section 7 of this Agreement relating thereto (including any rights of appeal of any Section 7 Proceeding). This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company), assigns, spouses, heirs, executors and personal and legal representatives.

12. Security. To the extent requested by Indemnitee and approved by the Board of Directors of the Company, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of Indemnitee.

13. Definitions. For purposes of this Agreement:

(a) "Change in Control" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) *Acquisition of Stock by Third Party*. Any Person, other than Advent International Corporation and its affiliates and other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company or a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing fifty (50%) or more of the combined voting power of the Company's then outstanding securities;

(ii) *Change in Board of Directors*. During any period of two (2) consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board of Directors, and any new director (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Section 13(a)(i), 13(a)(iii) or 13(a)(iv)) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the

period or whose election or nomination for election was previously so approved, cease for any reason to constitute a least a majority of the members of the Board of Directors;

(iii) *Corporate Transactions*. The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 51% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the board of directors or other governing body of such surviving entity; and

(iv) *Liquidation.* The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement or series of agreements for the sale or disposition by the Company of all or substantially all of the Company's assets, or, if such approval is not required, the decision by the Board of Directors to proceed with such a liquidation, sale, or disposition in one transaction or a series of related transactions.

(b) "Beneficial Owner" shall have the meaning given to such term in Rule 13d-3 under the Exchange Act; provided, however, that Beneficial Owner shall exclude any Person otherwise becoming a Beneficial Owner by reason of the stockholders of the Company approving a merger of the Company with another entity.

(c) "Corporate Status" describes the status of a person who is or was a director, officer, employee, agent or fiduciary of the Company, any direct or indirect subsidiary of the Company, or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the request of the Company.

(d) "Disinterested Director" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(e) "Enterprise" shall mean the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary.

(f) "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.

(g) "Expenses" shall include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other

disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding, or responding to, or objecting to, a request to provide discovery in any Proceeding. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding and any federal, state, local or foreign taxes imposed on Indemnitee as a result of the actual or deemed receipt of any payments under this Agreement, including without limitation the premium, security for, and other costs relating to any cost bond, supersede as bond, or other appeal bond or its equivalent. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(h) "Independent Counsel" means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(i) "Person" shall have the meaning as set forth in Sections 13(d) and 14(d) of the Exchange Act; provided, however, that Person shall exclude (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(j) "Proceeding" includes any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of the fact that Indemnitee is or was a director of the Company, by reason of any action taken by him or of any inaction on his part while acting as a director of the Company, or by reason of the fact that he is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other Enterprise; in each case whether or not he is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement; including one pending on or before the date of this Agreement, but excluding one initiated by an Indemnitee pursuant to Section 7 of this Agreement to enforce his rights under this Agreement.

14. Severability. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (a) the validity, legality, and enforceability of the remaining provisions of this Agreement (including, without limitation, each portion of any Section, paragraph or sentence of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (b) such provision or provisions shall be deemed reformed to the fullest extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (c) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any Section, paragraph or sentence of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby. Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee indemnification rights to the fullest extent permitted by applicable laws.

15. Enforcement and Binding Effect.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director of the Company.

(b) Without limiting any of the rights of Indemnitee under the Charter or By-laws of the Company as they may be amended from time to time, this Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

(c) The indemnification and advancement of expenses provided by, or granted pursuant to this Agreement shall be binding upon and be enforceable by the parties hereto and their respective successors and assigns (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company), shall continue as to an Indemnitee who has ceased to be a director, officer, employee or agent of the Company or of any other Enterprise at the Company's request, and shall inure to the benefit of Indemnitee and his or her spouse, assigns, heirs, devisees, executors and administrators and other legal representatives.

(d) The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all, substantially all or a substantial part, of the business and/or assets of the Company to expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

(e) The Company and Indemnitee agree herein that a monetary remedy for breach of this Agreement, at some later date, may be inadequate, impracticable and difficult of proof, and further agree that such breach may cause Indemnitee irreparable harm. Accordingly, the parties hereto agree that Indemnitee may enforce this Agreement by seeking injunctive relief and/or specific performance hereof, without any necessity of showing actual

damage or irreparable harm and that by seeking injunctive relief and/or specific performance, Indemnitee shall not he precluded from seeking or obtaining any other relief to which he may be entitled. The Company and Indemnitee further agree that Indemnitee shall be entitled to such specific performance and injunctive relief, including temporary restraining orders, preliminary injunctions and permanent injunctions, without the necessity of posting bonds or other undertaking in connection therewith. The Company acknowledges that in the absence of a waiver, a bond or undertaking may be required of Indemnitee by the Court, and the Company hereby waives any such requirement of such a bond or undertaking.

16. Modification and Waiver. No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

17. Notice By Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise.

18. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent:

(a) To Indemnitee at the address set forth below Indemnitee signature hereto.

(b) To the Company at:

NCS Multistage Holdings, Inc.
Attn: General Counsel
19450 State Highway 249, Suite 200
Houston, TX 77070

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

19. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

20. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

21. Usage of Pronouns. Use of the masculine pronoun shall be deemed to include usage of the feminine pronoun where appropriate.

22. Governing Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. The Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Chancery Court of the State of Delaware (the "Delaware Court"), and not in any other state or federal court in the United States of America or any court in any other country, (ii) generally and unconditionally consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (iv) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum. The foregoing consent to jurisdiction shall not constitute general consent to service of process in the state for any purpose except as provided above, and shall not be deemed to confer rights on any person other than the parties to this Agreement.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on and as of the day and year first above written.

NCS MULTISTAGE HOLDINGS, INC.

By: _____
Name:
Title:

INDEMNITEE

_____
Name: [●]

Address:

_____
_____
_____
_____
_____

Exhibit 10.10

DIRECTOR FORM

NCS MULTISTAGE HOLDINGS, INC.
2017 Equity Incentive Plan

Restricted Stock Unit Award Agreement

This Restricted Stock Unit Award Agreement (this "*Agreement*") is made by and between NCS Multistage Holdings, Inc., a Delaware corporation (the "*Company*"), and [•] (the "*Participant*"), effective as of [•], 2017 (the "*Date of Grant*").

RECITALS

WHEREAS, the Company has adopted the NCS Multistage Holdings, Inc. 2017 Equity Incentive Plan (as the same may be amended from time to time, the "*Plan*"), which Plan is incorporated herein by reference and made a part of this Agreement, and capitalized terms not otherwise defined in this Agreement shall have the meanings ascribed to those terms in the Plan; and

WHEREAS, the Committee has authorized and approved the grant of an Award to the Participant that will provide the Participant the opportunity to acquire shares of Common Stock ("*Shares*") upon the settlement of stock units on the terms and conditions set forth in the Plan and this Agreement ("*Restricted Stock Units*").

NOW THEREFORE, in consideration of the premises and mutual covenants set forth in this Agreement, the parties agree as follows:

1. Grant of Restricted Stock Unit Award. The Company hereby grants to the Participant, effective as of the Date of Grant, [•] Restricted Stock Units, on the terms and conditions set forth in the Plan and this Agreement, subject to adjustment as set forth in the Plan.

2. Vesting of Restricted Stock Units. Subject to the terms and conditions set forth in the Plan and this Agreement, the Restricted Stock Units shall vest as follows:

   (a) General. Except as otherwise provided in this Section 2, [100%][one-third] of the Restricted Stock Units shall vest on [the first anniversary of the Date of Grant][each of the first three (3) anniversaries of the Date of Grant], subject to the Participant's continued Service through such date.

   (b) Change of Control. The Restricted Stock Units shall fully vest upon a Change of Control, subject to continued Service through such date.

   (c) Termination of Service. All unvested Restricted Stock Units shall be forfeited upon the Participant's termination of Service with the Company or its Subsidiaries for any reason.

3. Payment

(a) Settlement. The Company shall deliver to the Participant within thirty (30) days following the earliest of (i) one year following the date of a termination of the Participant's Service for any reason other than cause, (ii) a Change of Control or (iii) the fifth anniversary of the Date of Grant a number of Shares equal to the aggregate number of Restricted Stock Units that have vested pursuant to Section 2. No fractional Shares shall be delivered; the Company shall pay cash in respect of any fractional Shares. The Company may deliver such shares either through book entry accounts held by, or in the name of, the Participant or cause to be issued a certificate or certificates representing the number of Shares to be issued in respect of the Restricted Stock Units, registered in the name of the Participant.

(b) Taxes. Participant shall be solely responsible for the payment and withholding of all income, employment and other taxes attributable to Participant under this Agreement, and Participant shall timely remit all taxes to the Internal Revenue Service and any other required governmental agencies. The Participant further acknowledges and agrees that, during and after the Participant's termination of Service, Participant will indemnify, defend and hold the Company harmless from all taxes, interest, penalties, fees, damages, liabilities, obligations, losses and expenses arising from a failure or alleged failure to make the required reports and payments for income taxes.

4. Adjustment of Shares. In the event of any change with respect to the outstanding shares of Common Stock contemplated by Section 4.5 of the Plan, the Restricted Stock Units may be adjusted in accordance with Section 4.5 of the Plan.

5. Miscellaneous Provisions

(a) Securities Laws Requirements. No Shares will be issued or transferred pursuant to this Agreement unless and until all then applicable requirements imposed by federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any exchanges upon which the Shares may be listed, have been fully met. As a condition precedent to the issuance of Shares pursuant to this Agreement, the Company may require the Participant to take any reasonable action to meet those requirements. The Committee may impose such conditions on any Shares issuable pursuant to this Agreement as it may deem advisable, including, without limitation, restrictions under the Securities Act, as amended, under the requirements of any exchange upon which shares of the same class are then listed and under any blue sky or other securities laws applicable to those Shares.

(b) Rights of a Shareholder of the Company. Prior to settlement of the Restricted Stock Units in Shares, neither the Participant nor the Participant's representative will have any rights as a shareholder of the Company with respect to any Shares underlying the Restricted Stock Units; provided that, if dividends or other

distributions are paid in respect of the Shares underlying unvested Restricted Stock Units, then a dividend equivalent equal to the amount paid in respect of one Share shall accumulate and be paid with respect to each unvested Restricted Stock Unit within forty-five (45) days following the date on which the unvested Restricted Stock Unit vests and then following vesting, any dividend equivalents paid with respect to shares underlying a vested Restricted Stock Unit shall be paid on a current basis.

(c) Transfer Restrictions. The Shares delivered hereunder will be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations and other requirements of the Securities and Exchange Commission, any stock exchange upon which such shares are listed, any applicable federal or state laws and any agreement with, or policy of, the Company or the Committee to which the Participant is a party or subject, and the Committee may cause orders or designations to be placed upon the books and records of the Company's transfer agent to make appropriate reference to such restrictions.

(d) No Right to Continued Service. Nothing in this Agreement or the Plan confers upon the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Subsidiary retaining the Participant) or of the Participant, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without cause.

(e) Notification. Any notification required by the terms of this Agreement will be given by the Participant (i) in writing addressed to the Company at its principal executive office and will be deemed effective upon actual receipt when delivered by personal delivery or by registered or certified mail, with postage and fees prepaid, or (ii) by electronic transmission to the Company's e-mail address of the Company's General Counsel and will be deemed effective upon actual receipt. Any notification required by the terms of this Agreement will be given by the Company (x) in writing addressed to the address that the Participant most recently provided to the Company and will be deemed effective upon personal delivery or within three (3) days of deposit with the United States Postal Service, by registered or certified mail, with postage and fees prepaid, or (y) by facsimile or electronic transmission to the Participant's primary work fax number or e-mail address (as applicable) and will be deemed effective upon confirmation of receipt by the sender of such transmission.

(f) Entire Agreement. This Agreement and the Plan constitute the entire agreement between the parties hereto with regard to the subject matter of this Agreement. This Agreement and the Plan supersede any other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter of this Agreement.

(g) Waiver. No waiver of any breach or condition of this Agreement will be deemed to be a waiver of any other or subsequent breach or condition whether of like or different nature.

(h) Successors and Assigns. The provisions of this Agreement will inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Participant, the Participant's executor, personal representative(s), distributees, administrator, permitted transferees, permitted assignees, beneficiaries, and legatee(s), as applicable, whether or not any such person will have become a party to this Agreement and have agreed in writing to be joined herein and be bound by the terms hereof.

(i) Severability. The provisions of this Agreement are severable, and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, then the remaining provisions will nevertheless be binding and enforceable.

(j) Amendment. Except as otherwise provided in the Plan, this Agreement will not be amended unless the amendment is agreed to in writing by both the Participant and the Company.

(k) Choice of Law; Jurisdiction. This Agreement and all claims, causes of action or proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or relate to this Agreement will be governed by the internal laws of the State of Delaware, excluding any conflicts or choice-of-law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

PARTICIPANT ACKNOWLEDGES THAT, BY SIGNING THIS AGREEMENT, PARTICIPANT IS WAIVING ANY RIGHT THAT PARTICIPANT MAY HAVE TO A JURY TRIAL RELATED TO THIS AGREEMENT.

(l) Signature in Counterparts. This Agreement may be signed in counterparts, manually or electronically, each of which will be an original, with the same effect as if the signatures to each were upon the same instrument.

(m) Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to any Awards granted under the Plan by electronic means or to request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Such on-line or electronic system shall satisfy notification requirements discussed in Section 5(e).

(n) Acceptance. The Participant hereby acknowledges receipt of a copy of the Plan and this Agreement. The Participant has read and understands the terms and provisions of the Plan and this Agreement, and accepts the Restricted Stock Units subject to all of the terms and conditions of the Plan and this Agreement. In the event of a conflict between any term or provision contained in this Agreement and a term or provision of the Plan, the applicable term and provision of the Plan will govern and prevail.

[Signature page follows.]

IN WITNESS WHEREOF, the Company and the Participant have executed this Restricted Stock Unit Award Agreement as of the dates set forth below.

PARTICIPANT

_____

Date: _____

NCS MULTISTAGE HOLDINGS, INC.

By: _____

Date: _____

[Signature Page – Restricted Stock Unit Award Agreement]

Exhibit 10.13

FORM OF OPTION AWARD AGREEMENT—EXEC

NCS MULTISTAGE HOLDINGS, INC.
2017 Equity Incentive Plan

Stock Option Award Agreement

This Stock Option Award Agreement (this "*Agreement*") is made by and between NCS Multistage Holdings, Inc., a Delaware corporation (the "*Company*"), and [•] (the "*Participant*"), effective as of [•] (the "*Date of Grant*").

RECITALS

WHEREAS, the Company has adopted the NCS Multistage Holdings, Inc. 2017 Equity Incentive Plan (as the same may be amended and/or amended and restated from time to time, the "*Plan*"), which Plan is incorporated herein by reference and made a part of this Agreement, and capitalized terms not otherwise defined in this Agreement shall have the meanings ascribed to those terms in the Plan; and

WHEREAS, the Committee has authorized and approved the grant to the Participant of Stock Options to purchase shares of Common Stock ("*Shares*") on the terms and conditions set forth in the Plan and this Agreement.

NOW THEREFORE, in consideration of the premises and mutual covenants set forth in this Agreement, the parties agree as follows:

1. Grant of Stock Options. The Company has granted to the Participant, effective as of the Date of Grant, the right and option to purchase, on the terms and conditions set forth in the Plan and this Agreement, all or any part of an aggregate of [•] Shares, subject to adjustment as set forth in the Plan (the "*Options*"). The Options are intended to be Nonqualified Stock Options.

2. Exercise Price. The exercise price of each Option is $[•] per Share, subject to adjustment as set forth in the Plan (the "*Exercise Price*").

3. Vesting of Options.

   (a) General. Except as otherwise provided in Section 3(b), [Insert percent or number of awards] of the Options shall vest and become exercisable on each of the first [_____] (__) anniversaries of the Date of Grant, subject to the Participant's continued Service through each applicable vesting date.

   (b) Termination of Service. Upon the Participant's termination of Service by the Company or its Subsidiaries without Cause (other than by reason of the Participant's death or Disability) or the Participant's resignation from the Company or its Subsidiaries for Good Reason, in each case within eighteen (18) months following a Change of Control, all unvested Options shall vest.

For purposes of this Agreement, "*Good Reason*" shall mean either (i) a material reduction in duties or authorities, (ii) material reduction in target compensation opportunity or base salary or (iii) relocation of the Participant's primary office location to a location that is more than thirty (30) miles from the Participant's current primary office location and the Participant's residence; provided that, in each case the Participant gives notice to the Company of a Good Reason event within thirty (30) days of the occurrence of such event, the Company does not cure such event within thirty (30) days of receipt of such notice and the Participant terminates employment within ten (10) days thereafter; provided further, however, that if a Participant is a party to any employment or other agreement governing the provision of services to the Company or any Subsidiary, and such agreement defines "Good Reason" (or term of like import), "Good Reason" shall have the meaning given to such term (or term of like import) in such agreement.

4. Forfeiture; Expiration.

(a) Termination of Service. Any unvested Options will be forfeited immediately, automatically and without consideration upon a termination of the Participant's Service for any reason. In the event the Participant's Service is terminated for Cause, all vested Options will also be forfeited immediately, automatically and without consideration upon such termination for Cause. Without limiting the generality of the foregoing, the Options and the Shares (and any resulting proceeds) will continue to be subject to Section 13 of the Plan.

(b) Expiration. Any unexercised Options will expire on the tenth (10th) anniversary of the Date of Grant (the "*Expiration Date*"), or earlier as provided in Section 5 of this Agreement or in the Plan.

5. Period of Exercise. Subject to the provisions of the Plan and this Agreement, the Participant may exercise all or any part of the vested Options at any time prior to the earliest to occur of:

(a) the Expiration Date;

(b) the date that is twelve (12) months following termination of the Participant's Service due to death or Disability;

(c) the date that is ninety (90) days following termination of the Participant's Service other than for death, Disability or Cause; or

(d) the date of termination of the Participant's Service for Cause.

6. Exercise of Options

(a) Notice of Exercise. Subject to Sections 4 and 5, the Participant or, in the case of the Participant's death or Disability, the Participant's representative may exercise all or any part of the vested Options by delivering to the Company at its principal office a written notice of exercise in the form attached as Exhibit A or any other form that the Committee may permit (such notice, a "*Notice of Exercise*"). The

Notice of Exercise will be signed by the person exercising the Options. In the event that the Options are being exercised by the Participant's representative, the Notice of Exercise will be accompanied by proof (satisfactory to the Committee) of the representative's right to exercise the Options. The Participant or the Participant's representative will deliver to the Committee, at the time of giving the Notice of Exercise, payment in a form permissible under Section 7 for the full amount of the Purchase Price (as defined below) and applicable withholding taxes as provided below.

(b) Issuance of Shares. After all requirements with respect to the exercise of the Options have been satisfied, the Committee will cause the Shares as to which the Options have been exercised to be issued (or, in the Committee's discretion, in un-certificated form, upon the books of the Company's transfer agent), registered in the name of the person exercising the Options (or in the names of such person and his or her spouse as community property or as joint tenants with right of survivorship). Neither the Company nor the Committee will be liable to the Participant or any other Person for damages relating to any delays in issuing the Shares or any mistakes or errors in the issuance of the Shares.

(c) Withholding Requirements. The Company shall have the power and the right to deduct or withhold automatically from any Shares deliverable under this Agreement, or to require the Participant or the Participant's representative to remit to the Company, the minimum statutory amount necessary to satisfy federal, state and local taxes, domestic or foreign, required by law or regulation to be withheld with respect to any taxable event arising as a result of this Agreement, or in the sole discretion of the Committee, such greater amount necessary to satisfy the Participant's expected tax liability, provided that, the withholding of such greater amount does not result in adverse tax or accounting consequences to the Company (collectively, "*Withheld Taxes*"); provided further, that any obligations to pay Withheld Taxes may be satisfied in the manner in which the Purchase Price is permitted to be paid under Section 7 or any other manner permitted by the Plan.

7. Payment for Shares. The "*Purchase Price*" will be the Exercise Price multiplied by the number of Shares with respect to which Options are being exercised. All or part of the Purchase Price and any Withheld Taxes may be paid as follows:

(a) Cash or Check. In cash or by bank certified check.

(b) Brokered Cashless Exercise. To the extent permitted by applicable law, from the proceeds of a sale through a broker on the date of exercise of some or all of the Shares to which the exercise relates. In that case, the Participant will execute a Notice of Exercise and provide the Plan administrator with a copy of irrevocable instructions to a broker to deliver promptly to the Company the amount of sale proceeds to pay the aggregate purchase price and/or Withheld Taxes, as applicable. To facilitate the foregoing, the Company may, to the extent permitted by applicable law, enter into agreements or coordinate procedures with one or more brokerage firms.

(c) Net Exercise. At the sole discretion of the Committee, by reducing the number of Shares otherwise deliverable upon the exercise of the Options by the number of Shares having a Fair Market Value equal to the amount of the Purchase Price and/or Withheld Taxes, as applicable.

(d) Surrender of Stock. In each instance, at the sole discretion of the Committee, by surrendering, or attesting to the ownership of, Shares that are already owned by the Participant free and clear of any restriction or limitation, unless the Committee specifically agrees in writing to accept such Shares subject to such restriction or limitation. Such Shares will be surrendered to the Company in good form for transfer and will be valued by the Company at their Fair Market Value on the date of the applicable exercise of the Options, or to the extent applicable, on the date the Withheld Taxes are to be determined. The Participant will not surrender, or attest to the ownership of, Shares in payment of the Purchase Price (or Withheld Taxes) if such action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to the Options for financial reporting purposes that otherwise would not have been recognized.

8. Adjustment to Options. In the event of any change with respect to the outstanding shares of Common Stock contemplated by Section 4.5 of the Plan, the Options may be adjusted in accordance with Section 4.5 of the Plan.

9. Miscellaneous Provisions

(a) Securities Laws Requirements. No Shares will be issued or transferred pursuant to this Agreement unless and until all then applicable requirements imposed by federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any exchanges upon which the Shares may be listed, have been fully met. As a condition precedent to the issuance of Shares pursuant to this Agreement, the Company may require the Participant to take any reasonable action to meet those requirements. The Committee may impose such conditions on any Shares issuable pursuant to this Agreement as it may deem advisable, including, without limitation, restrictions under the Securities Act, as amended, under the requirements of any exchange upon which shares of the same class are then listed and under any blue sky or other securities laws applicable to those Shares.

(b) Rights of a Shareholder of the Company. Neither the Participant nor the Participant's representative will have any rights as a shareholder of the Company with respect to any Shares subject to the Options until the Participant or the Participant's representative becomes entitled to receive those Shares by (i) filing a Notice of Exercise, (ii) paying the Purchase Price and Withheld Taxes as provided in this Agreement, and the Company actually receiving those amounts, (iii) the Company issuing those Shares and entering the name of the Participant in the register of shareholders of the Company as the registered holder of those Shares and (iv) satisfying any other conditions as the Committee reasonably requires.

(c) Transfer Restrictions. The Shares purchased by exercise of the Options will be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations and other requirements of the Securities and Exchange Commission, any stock exchange upon which such shares are listed, any applicable federal or state laws and any agreement with, or policy of, the Company or the Committee to which the Participant is a party or subject, and the Committee may cause orders or designations to be placed upon the books and records of the Company's transfer agent to make appropriate reference to such restrictions.

(d) No Right to Continued Service. Nothing in this Agreement or the Plan confers upon the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Subsidiary employing or retaining the Participant) or of the Participant, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without Cause.

(e) Notification. Any notification required by the terms of this Agreement will be given by the Participant (i) in a writing addressed to the Company at its principal executive office and will be deemed effective upon actual receipt when delivered by personal delivery or by registered or certified mail, with postage and fees prepaid, or (ii) by electronic transmission to the Company's e-mail address of the Company's General Counsel and will be deemed effective upon actual receipt. Any notification required by the terms of this Agreement will be given by the Company (x) in a writing addressed to the address that the Participant most recently provided to the Company and will be deemed effective upon personal delivery or within three (3) days of deposit with the United States Postal Service, by registered or certified mail, with postage and fees prepaid, or (y) by facsimile or electronic transmission to the Participant's primary work fax number or e-mail address (as applicable) and will be deemed effective upon confirmation of receipt by the sender of such transmission.

(f) Entire Agreement. This Agreement and the Plan constitute the entire agreement between the parties hereto with regard to the subject matter of this Agreement. This Agreement and the Plan supersede any other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter of this Agreement.

(g) Waiver. No waiver of any breach or condition of this Agreement will be deemed to be a waiver of any other or subsequent breach or condition whether of like or different nature.

(h) Successors and Assigns. The provisions of this Agreement will inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Participant, the Participant's executor, personal representative(s), distributees, administrator, permitted transferees, permitted assignees, beneficiaries, and legatee(s), as applicable, whether or not any such person will have become a party to this Agreement and have agreed in writing to be joined herein and be bound by the terms hereof.

(i) Severability. The provisions of this Agreement are severable, and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, then the remaining provisions will nevertheless be binding and enforceable.

(j) Amendment. Except as otherwise provided in the Plan, this Agreement will not be amended unless the amendment is agreed to in writing by both the Participant and the Company.

(k) Choice of Law; Jurisdiction. This Agreement and all claims, causes of action or proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or relate to this Agreement will be governed by the internal laws of the State of Delaware, excluding any conflicts or choice-of-law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

(l) Signature in Counterparts. This Agreement may be signed in counterparts, manually or electronically, each of which will be an original, with the same effect as if the signatures to each were upon the same instrument.

(m) Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to any Awards granted under the Plan by electronic means or to request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Such on-line or electronic system shall satisfy notification requirements discussed in Section 9(e).

(n) Acceptance. The Participant hereby acknowledges receipt of a copy of the Plan and this Agreement. The Participant has read and understands the terms and provisions of the Plan and this Agreement, and accepts the Options subject to all of the terms and conditions of the Plan and this Agreement. In the event of a conflict between any term or provision contained in this Agreement and a term or provision of the Plan, the applicable term and provision of the Plan will govern and prevail.

[Signature page follows.]

IN WITNESS WHEREOF, the Company and the Participant have executed this Stock Option Award Agreement as of the dates set forth below.

PARTICIPANT

Date: _____

NCS MULTISTAGE HOLDINGS, INC.

By: _____

Date: _____

Exhibit A

Notice of Exercise

NCS Multistage Holdings, Inc.
[Address]
Attention: Corporate Secretary

Date of Exercise: _____

Ladies & Gentlemen:

1. *Exercise of Options*. This constitutes notice to NCS Multistage Holdings, Inc. (the "*Company*") that, pursuant to my NCS Multistage Holdings, Inc. 2017 Equity Incentive Plan Stock Option Award Agreement, dated _____, 2017 (the "*Award Agreement*"), I elect to purchase the number of Shares set forth below for the price set forth below. Capitalized terms used and not otherwise defined in this notice will have the meanings ascribed to those terms in the Award Agreement. By signing and delivering this notice to the Company, I hereby acknowledge that I am the holder of the Options exercised by this notice and have full power and authority to exercise the Options.

Number of Shares as to which Options are exercised ("Optioned Shares"): _____

Shares to be issued in name of: _____

Date of Grant: _____

Total Purchase Price: _____

2. *Delivery of Payment*. With this notice, I hereby deliver to the Company the full exercise price of the Optioned Shares and any and all Withheld Taxes due in connection with the exercise of my Options, subject to satisfaction of the Purchase Price and any and all Withheld Taxes in any other manner consistent with the Award Agreement and the Plan.

3. *Rights as Stockholder*. While the Company will endeavor to process this notice in a timely manner, I acknowledge that, until the issuance of the Optioned Shares (or, in the Committee's discretion, in un-certificated form, upon the books of the Company's transfer agent) and my satisfaction of any other conditions imposed by the Committee pursuant to the Plan or as set forth in the Award Agreement, no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Optioned Shares, notwithstanding the exercise of my Options. No adjustment will be made for a dividend or other right for which the record date is prior to the date of issuance of the Optioned Shares.

4. *Interpretation*. Any dispute regarding the interpretation of this notice will be submitted promptly by me or by the Company to the Committee. The resolution of such a dispute by the Committee will be final and binding on all parties.

5. *Entire Agreement*. The Plan and the Award Agreement under which the Optioned Shares were granted are incorporated herein by reference and, together with this notice, constitute the entire agreement of the parties with respect to the subject matter of this notice.

Very truly yours,

Signature: _____

Name: _____

Address: _____

_____

Social Security Number: _____

Exhibit 10.14

FORM OF OPTION AWARD AGREEMENT – NON EXEC

NCS MULTISTAGE HOLDINGS, INC.
2017 Equity Incentive Plan

Stock Option Award Agreement

This Stock Option Award Agreement (this "*Agreement*") is made by and between NCS Multistage Holdings, Inc., a Delaware corporation (the "*Company*"), and [•] (the "*Participant*"), effective as of [•] (the "*Date of Grant*").

RECITALS

WHEREAS, the Company has adopted the NCS Multistage Holdings, Inc. 2017 Equity Incentive Plan (as the same may be amended and/or amended and restated from time to time, the "*Plan*"), which Plan is incorporated herein by reference and made a part of this Agreement, and capitalized terms not otherwise defined in this Agreement shall have the meanings ascribed to those terms in the Plan; and

WHEREAS, the Committee has authorized and approved the grant to the Participant of Stock Options to purchase shares of Common Stock ("*Shares*") on the terms and conditions set forth in the Plan and this Agreement.

NOW THEREFORE, in consideration of the premises and mutual covenants set forth in this Agreement, the parties agree as follows:

1. Grant of Stock Options. The Company has granted to the Participant, effective as of the Date of Grant, the right and option to purchase, on the terms and conditions set forth in the Plan and this Agreement, all or any part of an aggregate of [•] Shares, subject to adjustment as set forth in the Plan (the "*Options*"). The Options are intended to be Nonqualified Stock Options.

2. Exercise Price. The exercise price of each Option is $[•] per Share, subject to adjustment as set forth in the Plan (the "*Exercise Price*").

3. Vesting of Options.

   (a) General. Except as otherwise provided in Section 3(b), [Insert percent or number of awards] of the Options shall vest and become exercisable on each of the first [_____] (__) anniversaries of the Date of Grant, subject to the Participant's continued Service through each applicable vesting date.

   (b) Termination of Service. Upon the Participant's termination of Service by the Company or its Subsidiaries without Cause (other than by reason of the Participant's death or Disability) within eighteen (18) months following a Change of Control, all unvested Options shall vest.

4. Forfeiture; Expiration.

(a) Termination of Service. Any unvested Options will be forfeited immediately, automatically and without consideration upon a termination of the Participant's Service for any reason. In the event the Participant's Service is terminated for Cause, all vested Options will also be forfeited immediately, automatically and without consideration upon such termination for Cause. Without limiting the generality of the foregoing, the Options and the Shares (and any resulting proceeds) will continue to be subject to Section 13 of the Plan.

(b) Expiration. Any unexercised Options will expire on the tenth (10th) anniversary of the Date of Grant (the "*Expiration Date*"), or earlier as provided in Section 5 of this Agreement or in the Plan.

5. Period of Exercise. Subject to the provisions of the Plan and this Agreement, the Participant may exercise all or any part of the vested Options at any time prior to the earliest to occur of:

(a) the Expiration Date;

(b) the date that is twelve (12) months following termination of the Participant's Service due to death or Disability;

(c) the date that is ninety (90) days following termination of the Participant's Service other than for death, Disability or Cause; or

(d) the date of termination of the Participant's Service for Cause.

6. Exercise of Options

(a) Notice of Exercise. Subject to Sections 4 and 5, the Participant or, in the case of the Participant's death or Disability, the Participant's representative may exercise all or any part of the vested Options by delivering to the Company at its principal office a written notice of exercise in the form attached as Exhibit A or any other form that the Committee may permit (such notice, a "*Notice of Exercise*"). The Notice of Exercise will be signed by the person exercising the Options. In the event that the Options are being exercised by the Participant's representative, the Notice of Exercise will be accompanied by proof (satisfactory to the Committee) of the representative's right to exercise the Options. The Participant or the Participant's representative will deliver to the Committee, at the time of giving the Notice of Exercise, payment in a form permissible under Section 7 for the full amount of the Purchase Price (as defined below) and applicable withholding taxes as provided below.

(b) Issuance of Shares. After all requirements with respect to the exercise of the Options have been satisfied, the Committee will cause the Shares as to which the Options have been exercised to be issued (or, in the Committee's discretion, in un-certificated form, upon the books of the Company's transfer agent), registered in the name of the person exercising the Options (or in the names of such person and his or her spouse as community property or as joint tenants with right of survivorship). Neither the Company nor the Committee will be liable to the Participant or any other Person for damages relating to any delays in issuing the Shares or any mistakes or errors in the issuance of the Shares.

(c) Withholding Requirements. The Company shall have the power and the right to deduct or withhold automatically from any Shares deliverable under this Agreement, or to require the Participant or the Participant's representative to remit to the Company, the minimum statutory amount necessary to satisfy federal, state and local taxes, domestic or foreign, required by law or regulation to be withheld with respect to any taxable event arising as a result of this Agreement, or in the sole discretion of the Committee, such greater amount necessary to satisfy the Participant's expected tax liability, provided that, the withholding of such greater amount does not result in adverse tax or accounting consequences to the Company (collectively, "*Withheld Taxes*"); provided further, that any obligations to pay Withheld Taxes may be satisfied in the manner in which the Purchase Price is permitted to be paid under Section 7 or any other manner permitted by the Plan.

7. Payment for Shares. The "*Purchase Price*" will be the Exercise Price multiplied by the number of Shares with respect to which Options are being exercised. All or part of the Purchase Price and any Withheld Taxes may be paid as follows:

(a) Cash or Check. In cash or by bank certified check.

(b) Brokered Cashless Exercise. To the extent permitted by applicable law, from the proceeds of a sale through a broker on the date of exercise of some or all of the Shares to which the exercise relates. In that case, the Participant will execute a Notice of Exercise and provide the Plan administrator with a copy of irrevocable instructions to a broker to deliver promptly to the Company the amount of sale proceeds to pay the aggregate purchase price and/or Withheld Taxes, as applicable. To facilitate the foregoing, the Company may, to the extent permitted by applicable law, enter into agreements or coordinate procedures with one or more brokerage firms.

(c) Net Exercise. At the sole discretion of the Committee, by reducing the number of Shares otherwise deliverable upon the exercise of the Options by the number of Shares having a Fair Market Value equal to the amount of the Purchase Price and/or Withheld Taxes, as applicable.

(d) Surrender of Stock. In each instance, at the sole discretion of the Committee, by surrendering, or attesting to the ownership of, Shares that are already owned by the Participant free and clear of any restriction or limitation, unless the Committee specifically agrees in writing to accept such Shares subject to such restriction or limitation. Such Shares will be surrendered to the Company in good form for transfer and will be valued by the Company at their Fair Market Value on the date of the applicable exercise of the Options, or to the extent applicable, on the date the Withheld Taxes are to be determined. The Participant will not surrender, or

attest to the ownership of, Shares in payment of the Purchase Price (or Withheld Taxes) if such action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to the Options for financial reporting purposes that otherwise would not have been recognized.

8. Adjustment to Options. In the event of any change with respect to the outstanding shares of Common Stock contemplated by Section 4.5 of the Plan, the Options may be adjusted in accordance with Section 4.5 of the Plan.

9. Miscellaneous Provisions

(a) Securities Laws Requirements. No Shares will be issued or transferred pursuant to this Agreement unless and until all then applicable requirements imposed by federal and state securities and other laws, rules and regulations and by any regulatory agencies having jurisdiction, and by any exchanges upon which the Shares may be listed, have been fully met. As a condition precedent to the issuance of Shares pursuant to this Agreement, the Company may require the Participant to take any reasonable action to meet those requirements. The Committee may impose such conditions on any Shares issuable pursuant to this Agreement as it may deem advisable, including, without limitation, restrictions under the Securities Act, as amended, under the requirements of any exchange upon which shares of the same class are then listed and under any blue sky or other securities laws applicable to those Shares.

(b) Rights of a Shareholder of the Company. Neither the Participant nor the Participant's representative will have any rights as a shareholder of the Company with respect to any Shares subject to the Options until the Participant or the Participant's representative becomes entitled to receive those Shares by (i) filing a Notice of Exercise, (ii) paying the Purchase Price and Withheld Taxes as provided in this Agreement, and the Company actually receiving those amounts, (iii) the Company issuing those Shares and entering the name of the Participant in the register of shareholders of the Company as the registered holder of those Shares and (iv) satisfying any other conditions as the Committee reasonably requires.

(c) Transfer Restrictions. The Shares purchased by exercise of the Options will be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the Plan or the rules, regulations and other requirements of the Securities and Exchange Commission, any stock exchange upon which such shares are listed, any applicable federal or state laws and any agreement with, or policy of, the Company or the Committee to which the Participant is a party or subject, and the Committee may cause orders or designations to be placed upon the books and records of the Company's transfer agent to make appropriate reference to such restrictions.

(d) No Right to Continued Service. Nothing in this Agreement or the Plan confers upon the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Subsidiary employing or retaining the Participant) or of the Participant, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without Cause.

(e) Notification. Any notification required by the terms of this Agreement will be given by the Participant (i) in a writing addressed to the Company at its principal executive office and will be deemed effective upon actual receipt when delivered by personal delivery or by registered or certified mail, with postage and fees prepaid, or (ii) by electronic transmission to the Company's e-mail address of the Company's General Counsel and will be deemed effective upon actual receipt. Any notification required by the terms of this Agreement will be given by the Company (x) in a writing addressed to the address that the Participant most recently provided to the Company and will be deemed effective upon personal delivery or within three (3) days of deposit with the United States Postal Service, by registered or certified mail, with postage and fees prepaid, or (y) by facsimile or electronic transmission to the Participant's primary work fax number or e-mail address (as applicable) and will be deemed effective upon confirmation of receipt by the sender of such transmission.

(f) Entire Agreement. This Agreement and the Plan constitute the entire agreement between the parties hereto with regard to the subject matter of this Agreement. This Agreement and the Plan supersede any other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter of this Agreement.

(g) Waiver. No waiver of any breach or condition of this Agreement will be deemed to be a waiver of any other or subsequent breach or condition whether of like or different nature.

(h) Successors and Assigns. The provisions of this Agreement will inure to the benefit of, and be binding upon, the Company and its successors and assigns and upon the Participant, the Participant's executor, personal representative(s), distributees, administrator, permitted transferees, permitted assignees, beneficiaries, and legatee(s), as applicable, whether or not any such person will have become a party to this Agreement and have agreed in writing to be joined herein and be bound by the terms hereof.

(i) Severability. The provisions of this Agreement are severable, and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, then the remaining provisions will nevertheless be binding and enforceable.

(j) Amendment. Except as otherwise provided in the Plan, this Agreement will not be amended unless the amendment is agreed to in writing by both the Participant and the Company.

(k) Choice of Law; Jurisdiction. This Agreement and all claims, causes of action or proceedings (whether in contract, in tort, at law or otherwise) that may be based upon, arise out of or relate to this Agreement will be governed by the internal laws of the State of Delaware, excluding any conflicts or choice-of-law rule or principle that might otherwise refer construction or interpretation of this Agreement to the substantive law of another jurisdiction.

(l) Signature in Counterparts. This Agreement may be signed in counterparts, manually or electronically, each of which will be an original, with the same effect as if the signatures to each were upon the same instrument.

(m) Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to any Awards granted under the Plan by electronic means or to request the Participant's consent to participate in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Such on-line or electronic system shall satisfy notification requirements discussed in Section 9(e).

(n) Acceptance. The Participant hereby acknowledges receipt of a copy of the Plan and this Agreement. The Participant has read and understands the terms and provisions of the Plan and this Agreement, and accepts the Options subject to all of the terms and conditions of the Plan and this Agreement. In the event of a conflict between any term or provision contained in this Agreement and a term or provision of the Plan, the applicable term and provision of the Plan will govern and prevail.

[Signature page follows.]

IN WITNESS WHEREOF, the Company and the Participant have executed this Stock Option Award Agreement as of the dates set forth below.

PARTICIPANT

Date: _____

NCS MULTISTAGE HOLDINGS, INC.

By: _____

Date: _____

Exhibit A

Notice of Exercise

NCS Multistage Holdings, Inc.
[Address]
Attention: Corporate Secretary

Date of Exercise: _____

Ladies & Gentlemen:

1. *Exercise of Options*. This constitutes notice to NCS Multistage Holdings, Inc. (the "*Company*") that, pursuant to my NCS Multistage Holdings, Inc. 2017 Equity Incentive Plan Stock Option Award Agreement, dated _____, 2017 (the "*Award Agreement*"), I elect to purchase the number of Shares set forth below for the price set forth below. Capitalized terms used and not otherwise defined in this notice will have the meanings ascribed to those terms in the Award Agreement. By signing and delivering this notice to the Company, I hereby acknowledge that I am the holder of the Options exercised by this notice and have full power and authority to exercise the Options.

Number of Shares as to which Options are exercised ("Optioned Shares"): _____

Shares to be issued in name of: _____

Date of Grant: _____

Total Purchase Price: _____

2. *Delivery of Payment*. With this notice, I hereby deliver to the Company the full exercise price of the Optioned Shares and any and all Withheld Taxes due in connection with the exercise of my Options, subject to satisfaction of the Purchase Price and any and all Withheld Taxes in any other manner consistent with the Award Agreement and the Plan.

3. *Rights as Stockholder*. While the Company will endeavor to process this notice in a timely manner, I acknowledge that, until the issuance of the Optioned Shares (or, in the Committee's discretion, in un-certificated form, upon the books of the Company's transfer agent) and my satisfaction of any other conditions imposed by the Committee pursuant to the Plan or as set forth in the Award Agreement, no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Optioned Shares, notwithstanding the exercise of my Options. No adjustment will be made for a dividend or other right for which the record date is prior to the date of issuance of the Optioned Shares.

4. *Interpretation*. Any dispute regarding the interpretation of this notice will be submitted promptly by me or by the Company to the Committee. The resolution of such a dispute by the Committee will be final and binding on all parties.

5. *Entire Agreement*. The Plan and the Award Agreement under which the Optioned Shares were granted are incorporated herein by reference and, together with this notice, constitute the entire agreement of the parties with respect to the subject matter of this notice.

Very truly yours,

Signature: _____

Name: _____

Address: _____

Social Security Number: _____

Exhibit 10.15

EXCHANGE AGREEMENT

MEMORANDUM OF AGREEMENT effective as of the 20th day of December, 2012.

BETWEEN:

NCS ENERGY HOLDINGS, LLC
a Delaware limited liability company
("**NCS US**")

- and -

NCS OILFIELD SERVICES CANADA, INC.
a corporation amalgamated pursuant to the laws of Alberta
("**Exchangeco**")

- and -

CEMBLEND SYSTEMS INC.
a corporation incorporated pursuant to the laws of Alberta
("**Shareholder**")

- and -

PIONEER SUPER HOLDINGS, INC.
a corporation incorporated pursuant to the laws of Delaware
("**Pioneer**")

WHEREAS pursuant to a stock redemption and purchase agreement (the "**Purchase Agreement**") effective as of January 1, 2011 between Exchangeco, NCS US, NCS Energy Services, Inc., a Texas corporation, each of the shareholders of NCS Energy Services, Inc., Cemblend. and each of the shareholders of Cemblend, Exchangeco issued exchangeable shares (the "**Exchangeable Shares**") to Cemblend where such Exchangeable Shares were exchangeable, under certain circumstances, for Common Units of NCS US;

AND WHEREAS the articles of amalgamation of Exchangeco set forth the rights, privileges, restrictions and conditions (collectively, the "**Exchangeable Share Provisions**") attaching to the Exchangeable Shares;

AND WHEREAS Cemblend is currently the sole holder of Exchangeable Shares;

AND WHEREAS Pioneer is the indirect beneficial owner of all of the issued and outstanding voting common shares of Exchangeco;

AND WHEREAS NCS US and Exchangeco executed a support agreement dated January 1, 2011 (the "**Original Support Agreement**") and a exchange agreement dated January 1, 2011 (the "**Original Exchange Agreement**");

AND WHEREAS pursuant to the terms of a exchangeable shares exchange agreement (the "**Rights Exchange Agreement**") dated as of December 20, 2012, as amended from time to time,

by and among Exchangeco and Cemblend, among others, the Exchangeable Shares were exchanged for Class A exchangeable shares (the "**Class A Exchangeable Shares**") in the capital of Exchangeco, which Class A Exchangeable Shares are exchangeable, under certain circumstances, for Common Shares of Pioneer (the "**Exchangeable Shares Exchange**");

AND WHEREAS pursuant to the Rights Exchange Agreement, NCS US, Pioneer, Exchangeco and Cemblend have agreed to terminate each of the Original Support Agreement and Original Exchange Agreement and to enter into a new Support Agreement and a new Exchange Agreement in order to account for the Exchangeable Shares Exchange;

AND WHEREAS an existing or future Affiliate of Pioneer ("**Pioneer Affiliate**") may exercise the Retraction Call Right, the Redemption Call Right or the Liquidation Call Right;

NOW THEREFORE in consideration of the premises and mutual agreements and covenants herein contained (the receipt and adequacy of which consideration as to each of the parties hereto are hereby mutually acknowledged), the parties hereto hereby covenant and agree as follows:

ARTICLE 1
DEFINITIONS AND INTERPRETATION

1.1 Defined Terms

All capitalized terms used in this Agreement shall, unless otherwise defined herein, have the meanings given to them in the Exchangeable Share Provisions, as the case may be. In addition, the following terms shall have the following meanings:

(a) "**Automatic Exchange Right**" means the benefit of the obligation of Pioneer to effect the automatic exchange of Class A Exchangeable Shares for Pioneer Common Shares pursuant to Section 2.10;

(b) "**Insolvency Exchange Right**" has the meaning ascribed thereto in Section 2.1 hereof.

(c) "**Insolvency Event**" means the institution by Exchangeco of any proceeding to be adjudicated a bankrupt or insolvent or to be dissolved or wound up, or the consent of Exchangeco to the institution of bankruptcy, insolvency, dissolution or winding up proceedings against it, or the filing of a petition, answer or consent seeking dissolution or winding up under any bankruptcy, insolvency or analogous laws, including without limitation the *Companies Creditors' Arrangement Act* (Canada) and the *Bankruptcy and Insolvency Act* (Canada), and the failure by Exchangeco to contest in good faith any such proceedings commenced in respect of Exchangeco within 15 days of becoming aware thereof, or the consent by Exchangeco to the filing of any such petition or to the appointment of a receiver, or the making by Exchangeco of a general assignment for the benefit of creditors, or the admission in writing by Exchangeco of its inability to pay its debts generally as they become due, or Exchangeco not being permitted, pursuant to solvency requirements of applicable law, to redeem any Retracted Shares pursuant to Section 6.6 of the Exchangeable Share Provisions.

(d) "**Liquidation Event**" has the meaning ascribed thereto in Section 2.10 hereof.

(e) "**Purchase Price**" has the meaning given in Section 2.1 hereof.

(f) "**Special Voting Share**" means the share of preferred stock of Pioneer, having a par value of $0.01 per share, designated in the Amended and Restated Charter of Pioneer as the "Special Voting Share", which entitles the holder of record to a number of votes at meetings of shareholders holding of Pioneer Common Shares equal to the number of Class A Exchangeable Shares outstanding from time to time (other than Class A Exchangeable Shares held by Pioneer and its Affiliates) multiplied by the Exchange Ratio, which unit is to be issued to the Shareholder.

(g) "**Voting Rights**" means the voting rights attached to the Special Voting Share.

1.2 Interpretation not Affected by Headings, etc.

The division of this Agreement into articles, sections and paragraphs and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Agreement.

1.3 Number, Gender, etc.

Words importing the singular number only shall include the plural and vice versa. Words importing the use of any gender shall include all genders.

1.4 Date for any Action

In the event that any date on or by which any action is required or permitted to be taken under this Agreement is not a Business Day, such action shall be required or permitted to be taken on or by the next succeeding Business Day.

ARTICLE 2
EXCHANGE RIGHT AND AUTOMATIC EXCHANGE

2.1 Grant and Ownership of the Exchange Right

(a) In consideration for the payment of Cdn$100 by the Shareholder to Pioneer (the "**Purchase Price**"), Pioneer hereby grants to the Shareholder, subject to the provisions of applicable law, the right (the "**Insolvency Exchange Right**"), upon the occurrence and during the continuance of an Insolvency Event, to require Pioneer to purchase from the Shareholder all but not less than all of the Class A Exchangeable Shares held by the Shareholder and hereby grants to the Shareholder the Automatic Exchange Right, all in accordance with the provisions of this Agreement.

(b) If at any time in the future any taxing authority or court of competent jurisdiction makes a determination (to which the parties acquiesce or from which there is no further right to object or appeal) that the aggregate fair market value of the

Insolvency Exchange Rights and Automatic Exchange Rights conferred hereunder as of date of this Agreement is an amount other than the Purchase Price, then the Purchase Price for such rights shall be the fair market value thereof as finally determined and the parties shall take whatever steps as may be necessary or desirable to reflect such adjustment, including, without limitation, the payments of funds; provided, however, that any such steps, including the payment of funds, will only be made upon the agreement of all involved parties.

2.2 Legended Share Certificates

Exchangeco will cause each certificate representing Class A Exchangeable Shares to bear an appropriate legend notifying the Shareholder of:

(a) its right with respect to the exercise of the Insolvency Exchange Right in respect of the Class A Exchangeable Shares held by the Shareholder; and

(b) the Automatic Exchange Right.

2.3 Purchase Price of Class A Exchangeable Shares

The purchase price payable by Pioneer for each Class A Exchangeable Share to be purchased by Pioneer under the Insolvency Exchange Right shall be an amount per share equal to (a) the Current Market Price of an Pioneer Common Share on the last Business Day prior to the day of closing of the purchase and sale of such Class A Exchangeable Share under the Insolvency Exchange Right multiplied by the Exchange Ratio, which shall be satisfied in full by Pioneer issuing to such holder that number of Pioneer Common Shares equal to the Exchange Ratio, plus (b) to the extent not paid by Exchangeco, an additional amount equivalent to the full amount of all dividends declared and unpaid on each such Class A Exchangeable Share held by such holder on any dividend record date which occurred prior to the closing of the purchase and sale (the "**Dividend Amount**"). The purchase price for each such Class A Exchangeable Share so purchased may be satisfied only by Pioneer issuing that number of Pioneer Common Shares equal to the Exchange Ratio and on the applicable payment date a cheque representing the Dividend Amount, less any amounts withheld pursuant to Section 6.1 hereof

2.4 Exercise Instructions

Subject to the terms and conditions herein set forth, the Shareholder shall be entitled, upon the occurrence and during the continuance of an Insolvency Event, to exercise the Insolvency Exchange Right with respect to all or any part of the Class A Exchangeable Shares registered in the name of the Shareholder on the books of Exchangeco. To exercise the Insolvency Exchange Right, the Shareholder shall deliver to Pioneer, in person or by certified or registered mail, the certificates representing the Class A Exchangeable Shares which the Shareholder desires Pioneer to purchase under the Insolvency Exchange Right, duly endorsed in blank, and accompanied by such other documents and instruments as may be required to effect a transfer of Class A Exchangeable Shares under the *Business Corporations Act* (Alberta) and the by-laws of Exchangeco, the Shareholder Documentation and such additional documents and instruments as Pioneer may reasonably require together with (a) a duly completed form of notice of exercise of the Insolvency Exchange Right, contained on the reverse of or attached to the Class A

Exchangeable Share certificates, stating (i) that the Shareholder thereby exercises the Insolvency Exchange Right so as to require Pioneer to purchase from the Shareholder the Class A Exchangeable Shares specified therein, (ii) that the Shareholder has good title to and owns all such Class A Exchangeable Shares to be acquired by Pioneer free and clear of all liens, claims and encumbrances, and (iii) the names in which the Pioneer Common Shares issuable in connection with the exercise of the Insolvency Exchange Right and cheques for the balance of the purchase price, if any, are to be issued, and (b) payment (or evidence satisfactory to Exchangeco and Pioneer of payment) of the taxes (if any) payable as contemplated by section 2.7 of this Agreement.

2.5 Deliveries; Effect of Exercise

Promptly after receipt of the certificates representing the Class A Exchangeable Shares which the Shareholder desires Pioneer to purchase under the Insolvency Exchange Right, together with such documents and instruments of transfer and a duly completed form of notice of exercise of the Insolvency Exchange Right (and payment of taxes contemplated under Section 2.7, if any, or evidence thereof), duly endorsed for transfer to Pioneer, Pioneer shall issue forthwith the number of Pioneer Common Shares issuable in connection with the exercise of the Insolvency Exchange Right, and a wire transfer for the balance, if any, of the total purchase price therefor. Immediately upon the exercise of the Insolvency Exchange Right, as provided in this Section 2.5, the closing of the transaction of purchase and sale contemplated by the Insolvency Exchange Right shall be deemed to have occurred, and the holder of such Class A Exchangeable Shares shall be deemed to have transferred to Pioneer all of its right, title and interest in and to such Class A Exchangeable Shares and shall cease to be a holder of such Class A Exchangeable Shares and shall not be entitled to exercise any of the rights of a holder in respect thereof, other than the right to receive its proportionate part of the total purchase price therefor, unless the number of Pioneer Common Shares (together with a cheque for the balance, if any, of the total purchase price therefor) is not issued by Pioneer to the Shareholder (or to such other persons, if any, properly designated by the Shareholder), within five Business Days of the date of exercise, in which case the rights of the Shareholder shall remain unaffected until such Pioneer Common Shares are so issued by Pioneer and any such cheque is so delivered and paid.

2.6 Exercise of Insolvency Exchange Right Subsequent to Retraction

In the event that the Shareholder has exercised its right under Article 6 of the Exchangeable Share Provisions to require Exchangeco to redeem any or all of the Class A Exchangeable Shares held by the Shareholder (the "**Retracted Shares**") and is notified by Exchangeco pursuant to Section 6.6 of the Exchangeable Share Provisions that Exchangeco will not be permitted as a result of solvency requirements of applicable law to redeem all such Retracted Shares, and provided that Pioneer Affiliate shall not have exercised the Retraction Call Right with respect to the Retracted Shares and that the Shareholder has not revoked the retraction request delivered by the Shareholder to Exchangeco pursuant to Section 6.1 of the Exchangeable Share Provisions, the retraction request will constitute and will be deemed to constitute the exercise of the Insolvency Exchange Right with respect to those Retracted Shares which Exchangeco is unable to redeem. In any such event, Exchangeco hereby agrees with the Shareholder to notify Pioneer immediately of such prohibition against Exchangeco redeeming all of the Retracted Shares and to forward or cause to be forwarded immediately to Pioneer all relevant materials delivered by

the Shareholder to Exchangeco (including without limitation a copy of the retraction request delivered pursuant to Section 6.1 of the Exchangeable Share Provisions) in connection with such proposed redemption of the Retracted Shares and, subject to the provisions of applicable law, Pioneer will purchase such shares in accordance with the provisions of this Article 2.

2.7 Stamp or Other Transfer Taxes

Upon any sale of Class A Exchangeable Shares to Pioneer pursuant to the Insolvency Exchange Right or the Automatic Exchange Right, the Pioneer Common Shares issuable in connection with the payment of the total purchase price therefor shall be issued in the name of the holder of the Class A Exchangeable Shares so sold or in such name as the Shareholder may otherwise direct in writing without charge; provided, however, that the Shareholder (a) shall pay (and neither Pioneer nor Exchangeco shall be required to pay) any documentary, stamp, transfer or other taxes that may be payable in respect of any transfer involved in the issuance or delivery of such units to a person other than the Shareholder or (b) shall have established to the satisfaction of Pioneer and Exchangeco that such taxes, if any, have been paid.

2.8 Notice of Insolvency Event

Immediately upon the occurrence of an Insolvency Event or any event which with the giving of notice or the passage of time or both would be an Insolvency Event, Exchangeco and Pioneer shall give written notice thereof to the Shareholder, which notice shall include a brief description of the rights of the Shareholder with respect to the Insolvency Exchange Right.

2.9 Pioneer Common Shares

Pioneer hereby represents, warrants and covenants that the Pioneer Common Shares issuable hereunder will be duly authorized and validly issued as fully paid and non-assessable and shall be free and clear of any lien, claim or encumbrance.

2.10 Automatic Exchange on Liquidation of Pioneer

(a) Pioneer will give the Shareholder notice of each of the following events at the time set forth below:

(i) in the event of any determination by the board of directors (the "**Board**") to institute voluntary liquidation, dissolution or winding up proceedings with respect to Pioneer or to effect any other distribution of assets of Pioneer among its shareholders for the purpose of winding up its affairs, at least 30 days prior to the proposed effective date of such liquidation, dissolution, winding up or other distribution; and

(ii) as soon as practicable following the earlier of (A) receipt by Pioneer of notice of and (B) Pioneer otherwise becoming aware of any threatened or instituted claim, suit, petition or other proceedings with respect to the involuntary liquidation, dissolution or winding-up of Pioneer or to effect any other distribution of assets of Pioneer among its shareholders for the purpose of winding up its affairs, in each case where Pioneer has failed to contest in good faith any such proceeding commenced in respect of Pioneer within 30 days of becoming aware thereof;

which notice shall include a brief description of the rights of the Shareholder with respect to the automatic exchange of Class A Exchangeable Shares into Pioneer Common Shares as provided in section 2.10(b) thereof (any such event being hereinafter referred to as a "**Liquidation Event**").

(b) Upon receiving a notice of a Liquidation Event, the Shareholder shall forthwith provide Pioneer with the Shareholder Documentation.

(c) In order that the Shareholder will be able to participate on a pro rata basis with the holders of Pioneer Common Shares in the distribution of assets of Pioneer in connection with a Liquidation Event, on the fifth Business Day prior to the effective date of a Liquidation Event (the "**Liquidation Event Effective Date**") all of the then outstanding Class A Exchangeable Shares shall be automatically exchanged for Pioneer Common Shares, subject to the provisions of applicable law. To effect such automatic exchange, Pioneer shall purchase each Class A Exchangeable Share outstanding on the fifth Business Day prior to the Liquidation Event Effective Date and held by the Shareholder, and the Shareholder shall sell the Class A Exchangeable Shares held by it at such time, for a purchase price per Class A Exchangeable Share equal to (a) the Current Market Price of an Pioneer Common Share on the fifth Business Day prior to the Liquidation Event Effective Date multiplied by the Exchange Ratio, which shall be satisfied in full by Pioneer issuing to the Shareholder that number of Pioneer Common Shares equal to the Exchange Ratio, plus (b) to the extent not paid by Exchangeco, an additional amount equivalent to the full amount of all dividends declared and unpaid on each such Class A Exchangeable Share held by such holder on any dividend record date which occurred prior to the date of the exchange.

(d) On the fifth Business Day prior to the Liquidation Event Effective Date, the closing of the transaction of purchase and sale contemplated by the automatic exchange of Class A Exchangeable Shares shall be deemed to have occurred, and the Shareholder shall be deemed to have transferred to Pioneer all of the Shareholder's right, title and interest in and to its Class A Exchangeable Shares and shall cease to be a holder of such Class A Exchangeable Shares and Pioneer shall issue Pioneer Common Shares issuable upon the automatic exchange of Class A Exchangeable Shares and a cheque for the balance, if any, of the total purchase price for such Class A Exchangeable Shares. Concurrently with the Shareholder ceasing to be a holder of Class A Exchangeable Shares, the Shareholder shall be considered and deemed for all purposes to be the holder of the Pioneer Common Shares issued pursuant to the automatic exchange of Class A Exchangeable Shares for Pioneer Common Shares.

ARTICLE 3
SPECIAL VOTING SHARE

3.1 Issue and Ownership of the Special Voting Share

Pioneer hereby issues the Special Voting Share to the Shareholder to be legally and beneficially owned by the Shareholder. Pioneer hereby acknowledges receipt from the Shareholder of good and valuable consideration (and the adequacy thereof) for the issuance of the Special Voting Share by Pioneer to the Shareholder. Except as specifically authorized by this Agreement or the Operating Agreement, the Shareholder shall have no power or authority to sell, transfer or otherwise deal in or with the Special Voting Share and the Special Voting Share shall not be used or disposed of by the Shareholder for any purpose other than the purposes for which the Special Voting Share was issued to the Shareholder pursuant to this Agreement; provided that the Shareholder shall be required to transfer such Special Voting Share in connection with a transfer of its Class A Exchangeable Shares, to the extent permitted by Exchangeco's Articles of Incorporation and any agreement to which the Shareholder is a party, including the Members Agreement.

ARTICLE 4
EXERCISE OF VOTING RIGHTS

4.1 Voting Rights

The Shareholder, as the holder of record of the Special Voting Share, shall be entitled to all of the Voting Rights, including the right to vote in person or by proxy the Special Voting Share on any matters, questions, proposals or propositions whatsoever that may properly come before the holders of Pioneer Common Shares (as hereinafter defined).

4.2 Copies of Shareholder Information

Pioneer will deliver to the Shareholder a copy of all materials distributed from time to time to all holders of Pioneer Common Shares.

4.3 Other Materials

Immediately after receipt by Pioneer or shareholders of Pioneer of any material sent or given by or on behalf of a third party to holders of Pioneer Common Shares generally, Pioneer shall use its reasonable best efforts to obtain and deliver to the Shareholder copies thereof.

4.4 Termination of Voting Rights

All of the rights of the Shareholder with respect to the Voting Rights shall be deemed to be surrendered by the Shareholder to Pioneer and such Voting Rights represented thereby shall cease immediately upon the delivery by the Shareholder to Pioneer of the certificates representing all of the Shareholder's Class A Exchangeable Shares in connection with the exercise by it of the Exchange Right or the occurrence of the automatic exchange of Class A Exchangeable Shares for Pioneer Common Shares, as specified in Article 2.10 (unless, in either case, Pioneer shall not have delivered the requisite Pioneer Common Shares issuable in exchange

therefor to the Shareholder), or upon the redemption of Class A Exchangeable Shares pursuant to Article 6 or 7 of the Exchangeable Share Provisions, or upon the effective date of the liquidation, dissolution or winding-up of Exchangeco pursuant to Article 5 of the Exchangeable Share Provisions, or upon the purchase of Class A Exchangeable Shares from the holder thereof by Pioneer Affiliate pursuant to the exercise by Pioneer Affiliate of the Retraction Call Right, the Redemption Call Right or the Liquidation Call Right.

ARTICLE 5
RESTRICTIONS ON ISSUE OF PIONEER SPECIAL VOTING STOCK

5.1 Issue

During the term of this Agreement, Pioneer will not, without the consent of the holders at the relevant time of Class A Exchangeable Shares, given in accordance with Section 10.2 of the Exchangeable Share Provisions, issue any additional Special Voting Shares in addition to the Special Voting Share.

ARTICLE 6
MISCELLANEOUS

6.1 Withholding Rights

Pioneer, Pioneer Affiliate and Exchangeco shall be entitled to deduct and withhold from the consideration otherwise payable to the Shareholder pursuant to this Agreement such amounts as Pioneer, Pioneer Affiliate or Exchangeco is required to deduct and withhold with respect to such payment under the United States Internal Revenue Code of 1986, as amended, the *Income Tax Act* (Canada), as amended, or any provision of state, provincial, local or foreign tax law. To the extent that amounts are so withheld, such withheld amounts shall be treated for all purposes hereof as having been paid to the Shareholder in respect of which such deduction and withholding was made, provided that such withheld amounts are actually remitted to the appropriate taxing authority. To the extent that the amount so required or permitted to be deducted or withheld from any payment to the Shareholder exceeds the cash portion of the consideration otherwise payable to the Shareholder, Pioneer, Pioneer Affiliate and Exchangeco are hereby authorized to sell or otherwise dispose of such portion of the consideration as is necessary to provide sufficient funds to Pioneer, Pioneer Affiliate or Exchangeco, as the case may be, to enable it to comply with such deduction or withholding requirement and Pioneer, Pioneer Affiliate or Exchangeco shall give an accounting to the Shareholder with respect thereto and any balance of such proceeds of sale.

6.2 Notice to Parties

All notices and other communications between the parties hereunder shall be in writing and shall be deemed to have been given if delivered personally or sent via email to the parties at the following addresses (or at such other address for such party as shall be specified in like notice):

(a) if to Exchangeco:

NCS Oilfield Services Canada, Inc.
2800, 715 - 5th Avenue SW
Calgary, Alberta T2P 2X6
Canada
Attention: Robert Nipper
Email: rnipper@ncsenergyservices.com

(b) if to Pioneer or Pioneer Affiliate:

c/o Advent International Corp.
75 State Street
Boston, MA 02109
United States of America
Attention: Guvinder Grewal; James Westra
Email: ggrewal@adventinternational.com;
jwestra@adventinternational.com

(c) if to the Shareholder:

3703 609-8th Street SW
Calgary, AB T2P 2A6
Canada
Attention: Marty Stromquist
Email: Marty@ncsenergyservices.com

Any notice or other communication given personally shall be deemed to have been given and received upon delivery thereof and if sent by email shall be deemed to have been given and received on the date of receipt thereof unless such day is not a Business Day in which case it shall be deemed to have been given and received upon the immediately following Business Day.

6.3 Time of the Essence

Time shall be of the essence of this Agreement and all of the provisions of this Agreement.

6.4 No Assignment

The Shareholder may not assign, transfer or otherwise convey the whole or any part of the Shareholder’s rights or obligations under this Agreement to any person without the express written consent of Pioneer.

6.5 Successors

This Agreement shall be binding upon and shall enure to the benefit of the parties hereto, their heirs, legal representatives, successors and permitted assigns.

6.6 Further Assurances

Each of the parties shall do all such things and provide all such reasonable assurances as may be required to consummate the agreements and transactions contemplated hereby and each party shall execute and deliver such further documents or instruments required by any other party as may be reasonably necessary or desirable to effect the purpose of this Agreement and to carry out its provisions.

6.7 Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the Province of Alberta and the laws of Canada applicable therein.

6.8 Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which taken together shall constitute one and the same instrument.

6.9 Termination of the Original Exchange Agreement

NCS US, Exchangeco and Cemblend agree that upon the execution of this Exchange Agreement, the Original Exchange Agreement will automatically terminate, without any further action by the parties thereto, and that all of the parties to the Original Exchange Agreement will have no further rights or obligations thereunder.

[Signature pages to immediately follow]

IN WITNESS WHEREOF the parties have duly executed this Agreement.

NCS ENERGY HOLDINGS, LLC

Per: /s/ Mark Ludwig

Name: Mark Ludwig
Title: Vice President

NCS OILFIELD SERVICES CANADA, INC.

Per: /s/ Robert Nipper

Name: Robert Nipper
Title: President

[SIGNATURE PAGE TO AMENDED EXCHANGE AGREEMENT]

CEMBLEND SYSTEMS INC.

Per: /s/ Marty Stromquist

Name: Marty Stromquist
Title: Chief Executive Officer

[SIGNATURE PAGE TO AMENDED EXCHANGE AGREEMENT]

PIONEER SUPER HOLDINGS, INC.

Per: /s/ Gurinder Grewal

Name: Gurinder Grewal
Title: Vice President

[SIGNATURE PAGE TO AMENDED EXCHANGE AGREEMENT]

Exhibit 10.16

CALL RIGHTS AGREEMENT

MEMORANDUM OF AGREEMENT effective as of the 20th day of December, 2012.

BETWEEN:

NCS ENERGY HOLDINGS, LLC
a Delaware limited liability company
("NCS US")

- and -

NCS OILFIELD SERVICES CANADA, INC.
a corporation amalgamated pursuant to the laws of Alberta
("Exchangeco")

- and -

CEMBLEND SYSTEMS INC.
a corporation incorporated pursuant to the laws of Alberta
("Shareholder")

- and -

PIONEER SUPER HOLDINGS, INC.
a corporation incorporated pursuant to the laws of Delaware
("Pioneer")

WHEREAS pursuant to a stock redemption and purchase agreement (the "**Purchase Agreement")** effective as of January 1, 2011 between Exchangeco, NCS US, NCS Energy Services, Inc., a Texas corporation, each of the shareholders of NCS Energy Services, Inc., Cemblend, and each of the shareholders of Cemblend, Exchangeco issued exchangeable shares (the "**Exchangeable Shares")** to Cemblend where such Exchangeable Shares were exchangeable, under certain circumstances, for Common Units of NCS US;

AND WHEREAS upon completion of the transactions contemplated by the Purchase Agreement, the Shareholder became the registered and beneficial owner of all of the issued and outstanding Exchangeable Shares;

AND WHEREAS the articles of amalgamation of Exchangeco set forth the rights, privileges, restrictions and conditions (collectively, the "**Exchangeable Share Provisions")** attaching to the Exchangeable Shares;

AND WHEREAS Pioneer is the indirect beneficial owner of all of the issued and outstanding voting common shares of Exchangeco;

AND WHEREAS NCS US, Exchangeco and the Shareholder executed a call rights agreement dated January 1, 2011 (the "Original **Call Rights Agreement");**

AND WHEREAS pursuant to the terms of an exchangeable shares exchange agreement (the "**Rights Exchange Agreement")** dated as of December 20, 2012, as amended from time to time, by and among Exchangeco and Cemblend, among others, the Exchangeable Shares were exchanged for Class A exchangeable shares ("**Class A Exchangeable Shares")** in the capital of Exchangeco, which Class A Exchangeable Shares are exchangeable, under certain circumstances, for common shares of Pioneer (the "**Exchangeable Shares Exchange");**

AND WHEREAS pursuant to the Rights Exchange Agreement, NCS US, Pioneer, Exchangeco and Cemblend have agreed to terminate the Original Call Rights Agreement and enter into this new Call Rights Agreement in order to account for the Exchangeable Shares Exchange;

AND WHEREAS an existing or future Affiliate of Pioneer ("**Pioneer Affiliate")** may exercise the Retraction Call Right, the Redemption Call Right or the Liquidation Call Right;

NOW THEREFORE in consideration of the premises and mutual agreements and covenants herein contained (the receipt and adequacy of which consideration as to each of the parties hereto are hereby mutually acknowledged), the parties hereto hereby covenant and agree as follows:

ARTICLE 1
DEFINITIONS AND INTERPRETATION

1.1 Defined Terms

All capitalized terms used in this Agreement shall, unless otherwise defined herein, have the meanings given to them in the Exchangeable Share Provisions.

1.2 Interpretation not Affected by Headings, etc.

The division of this Agreement into articles, sections and paragraphs and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Agreement.

1.3 Number, Gender, etc.

Words importing the singular number only shall include the plural and vice versa. Words importing the use of any gender shall include all genders.

1.4 Date for any Action

In the event that any date on or by which any action is required or permitted to be taken under this Agreement is not a Business Day, such action shall be required or permitted to be taken on or by the next succeeding Business Day.

ARTICLE 2

CERTAIN RIGHTS OF PIONEER AND PIONEER AFFILIATE TO ACQUIRE CLASS A EXCHANGEABLE SHARES

2.1 Liquidation Call Right

(a) Each of Pioneer and Pioneer Affiliate shall have the overriding right (the "**Liquidation Call Right"),** in the event of and notwithstanding the proposed liquidation, dissolution or winding-up of Exchangeco pursuant to Article 5 of the Exchangeable Share Provisions, to purchase from all but not less than all of the holders of Class A Exchangeable Shares (other than Pioneer or any direct or indirect wholly-owned subsidiary of Pioneer) on the Liquidation Date (as defined in the Exchangeable Share Provisions) all but not less than all of the Class A Exchangeable Shares held by each such holder on payment by Pioneer or Pioneer Affiliate of an amount per Class A Exchangeable Share (the "**Liquidation Call Purchase Price")** equal to the Current Market Price of a Pioneer Common Share on the last Business Day prior to the Liquidation Date multiplied by the Exchange Ratio, which shall be satisfied in full by Pioneer or Pioneer Affiliate, as applicable, causing to be delivered to such holder that number of Pioneer Common Shares equal to the Exchange Ratio (for each Class A Exchangeable Share presented), plus, to the extent not paid by Exchangeco, an additional amount equal to the full amount of all declared and unpaid dividends on such Class A Exchangeable Share held by such holder on any dividend record date which occurred prior to the date of purchase by Pioneer or Pioneer Affiliate (the "**Dividend Amount")**. In the event of the exercise of the Liquidation Call Right by Pioneer or Pioneer Affiliate, the Shareholder shall be obligated to sell all the Class A Exchangeable Shares held by the Shareholder to Pioneer or Pioneer Affiliate, as applicable, on the Liquidation Date on payment by Pioneer or Pioneer Affiliate to the Shareholder of the Liquidation Call Purchase Price for each such Class A Exchangeable Share, and Exchangeco shall have no obligation to pay the Liquidation Amount of such shares so purchased by Pioneer or Pioneer Affiliate

(b) To exercise the Liquidation Call Right, Pioneer or Pioneer Affiliate, as applicable, must notify Exchangeco as agent for the holders of Class A Exchangeable Shares of Pioneer's or Pioneer Affiliate's intention to exercise such right at least 30 days before the Liquidation Date in the case of a voluntary liquidation, dissolution or winding up of Exchangeco and at least five Business Days before the Liquidation Date in the case of an involuntary liquidation, dissolution or winding up of Exchangeco. Exchangeco will notify the holders of Class A Exchangeable Shares as to whether or not Pioneer or Pioneer Affiliate has exercised the Liquidation Call Right forthwith after the expiry of the period during which the same may be exercised by Pioneer or Pioneer Affiliate If Pioneer or Pioneer Affiliate exercises the Liquidation Call Right, on the Liquidation Date Pioneer or Pioneer Affiliate, as applicable, will purchase and the holders will sell all of the Class A Exchangeable Shares then outstanding for a price per Class A Exchangeable Share equal to the Liquidation Call Purchase Price.

(c) For the purposes of completing the purchase of the Class A Exchangeable Shares pursuant to the Liquidation Call Right, Pioneer or Pioneer Affiliate shall prepare, on or before the Liquidation Date, a cheque of Pioneer or Pioneer Affiliate, as applicable, representing the aggregate Dividend Amount in payment of the total Liquidation Call Purchase Price less any amounts withheld pursuant to Section 3.1 hereof. Provided that Pioneer or Pioneer Affiliate has complied with the immediately preceding sentence, on and after the Liquidation Date the rights of each holder of Class A Exchangeable Shares (other than Pioneer or any direct or indirect wholly-owned subsidiary of Pioneer) will be limited to receiving such holder's proportionate part of the total Liquidation Call Purchase Price payable by Pioneer or Pioneer Affiliate upon presentation and surrender by the Shareholder of certificates representing the Class A Exchangeable Shares held by such Shareholder and the Shareholder shall on and after the Liquidation Date be considered and deemed for all purposes to be the holder of any Pioneer Common Shares to which it is entitled provided such holder provides or has provided Pioneer with the Shareholder Documentation. Upon surrender to Pioneer or Pioneer Affiliate, as applicable, of a certificate or certificates representing Class A Exchangeable Shares, together with such other documents and instruments as may be required to effect a transfer of Class A Exchangeable Shares under the *Business Corporations Act* (Alberta) and the bylaws of Exchangeco and such additional documents and instruments as Exchangeco and Pioneer may reasonably require, including the Shareholder Documentation, the holder of such surrendered certificate or certificates shall be entitled to receive in exchange therefor Pioneer Common Shares to which the Shareholder is entitled and a cheque or cheques of Pioneer or Pioneer Affiliate, as applicable, in payment of the remaining portion, if any, of the total Liquidation Call Purchase Price less any amount withheld pursuant to Section 3.1 hereof. If Pioneer or Pioneer Affiliate does not exercise the Liquidation Call Right in the manner described above, on the Liquidation Date the holders of the Class A Exchangeable Shares will be entitled to receive in exchange therefor the liquidation price otherwise payable by Exchangeco in connection with the liquidation, dissolution or winding-up of Exchangeco pursuant to Article 5 of the Exchangeable Share Provisions.

2.2 Redemption Call Right

(a) Each of Pioneer and Pioneer Affiliate shall have the overriding right (the "**Redemption Call Right**"), notwithstanding the proposed redemption of Class A Exchangeable Shares by Exchangeco pursuant to Article 7 of the Exchangeable Share Provisions, to purchase from the holders of Class A Exchangeable Shares (other than Pioneer or any direct or indirect wholly-owned subsidiary of Pioneer) on the Redemption Date all but not less than all of the Class A Exchangeable Shares held by each such holder which are the subject of such redemption, on payment by Pioneer or Pioneer Affiliate, as applicable, to each holder of an amount per Class A Exchangeable Share (the "**Redemption Call Purchase Price**") equal to the Current Market Price of an Pioneer Common Share on the last Business Day prior to the Redemption Date multiplied by the Exchange Ratio, which shall be satisfied in full by Pioneer or Pioneer Affiliate

causing to be delivered to such holder that number of Pioneer Common Shares equal to the Exchange Ratio (for each Class A Exchangeable Share presented), plus the Dividend Amount. In the event of the exercise of the Redemption Call Right by Pioneer or Pioneer Affiliate, each holder shall be obligated to sell all of the Class A Exchangeable Shares held by the holder which are the subject of the redemption to Pioneer or Pioneer Affiliate on the Redemption Date on payment by Pioneer or Pioneer Affiliate, as applicable, to the holder of the Redemption Call Purchase Price for each such share, and Exchangeco shall have no obligation to redeem such shares so purchased by Pioneer or Pioneer Affiliate.

(b) To exercise the Redemption Call Right, Pioneer or Pioneer Affiliate, as applicable, must notify Exchangeco, as agent for the holders of Class A Exchangeable Shares, of Pioneer Affiliate's intention to exercise such right at least 60 days before the Redemption Date, except in the case of a redemption occurring as a result of an Pioneer Control Transaction or Cemblend Default Event, in which case Pioneer or Pioneer Affiliate shall so notify Exchangeco on or before the Redemption Date. Exchangeco will notify the holders of Class A Exchangeable Shares as to whether or not Pioneer or Pioneer Affiliate, as applicable, has exercised the Redemption Call Right forthwith after the expiry of the period during which the same may be exercised by Pioneer or Pioneer Affiliate If Pioneer or Pioneer Affiliate exercises the Redemption Call Right, then on the Redemption Date, Pioneer or Pioneer Affiliate, as applicable, will purchase and the holders will sell all of the Class A Exchangeable Shares then outstanding for a price per share equal to the Redemption Call Purchase Price.

(c) For the purposes of completing the purchase of the Class A Exchangeable Shares pursuant to the Redemption Call Right, Pioneer or Pioneer Affiliate, as applicable, shall prepare a cheque or cheques of Pioneer or Pioneer Affiliate, as applicable, representing the aggregate Dividend Amount in payment of the total Redemption Call Purchase Price, less any amounts withheld pursuant to Section 3.1 hereof. Provided that Pioneer or Pioneer Affiliate has complied with the immediately preceding sentence, on and after the Redemption Date, the rights of each holder of Class A Exchangeable Shares (other than Pioneer or any direct or indirect wholly-owned subsidiary of Pioneer) will be limited to receiving such holder's proportionate part of the total Redemption Call Purchase Price payable by Pioneer or Pioneer Affiliate upon presentation and surrender by the holder of certificates representing the Class A Exchangeable Shares held by such holder and the holder shall, on and after the Redemption Date, be considered and deemed for all purposes to be the holder of the Pioneer Common Shares to which it is entitled provided such holder provides or has provided Pioneer with the Shareholder Documentation. Upon surrender to Pioneer or Pioneer Affiliate, as applicable, of a certificate or certificates representing Class A Exchangeable Shares, together with such other documents and instruments as may be required to effect a transfer of Class A Exchangeable Shares under the *Business Corporations Act* (Alberta) and the by-laws of Exchangeco and such additional documents and instruments as Exchangeco and Pioneer may reasonably require, including the Shareholder Documentation, the holder of such surrendered certificate or certificates shall be

entitled to receive in exchange therefor, and Pioneer or Pioneer Affiliate, as applicable, shall deliver to such holder a cheque or cheques of Pioneer or Pioneer Affiliate, as applicable, in payment of the remaining portion, if any, of the total Redemption Call Purchase Price, less any amounts withheld pursuant to Section 3.1 hereof. If Pioneer or Pioneer Affiliate does not exercise the Redemption Call Right in the manner described above, on the Redemption Date the holders of the Class A Exchangeable Shares will be entitled to receive in exchange therefor the redemption price otherwise payable by Exchangeco in connection with the redemption of the Class A Exchangeable Shares pursuant to Article 7 of the Exchangeable Share Provisions.

2.3 Retraction Call Right

(a) A holder of Class A Exchangeable Shares shall be entitled at any time, subject to the exercise by Pioneer Affiliate or Pioneer of the Retraction Call Right and otherwise upon compliance with the provisions of Article 6 of the Exchangeable Share Provisions, to require Exchangeco to redeem any or all of the Class A Exchangeable Shares registered in the name of such holder for an amount per share equal to the Retraction Price, which shall be satisfied in full by Exchangeco causing to be delivered to such holder that number of Pioneer Common Shares equal to the Exchange Ratio for each Class A Exchangeable Share presented and surrendered by the holder, together with, on the payment date therefor, all declared and unpaid dividends on any such Class A Exchangeable Share held by such holder on any dividend record date which occurred prior to the Retraction Date. To effect such redemption, the holder shall present and surrender at the registered office of Exchangeco the certificate or certificates representing the Class A Exchangeable Shares which the holder desires to have Exchangeco redeem, together with such other documents and instruments as may be required to effect a transfer of Class A Exchangeable Shares under the *Business Corporations Act* (Alberta) and the by-laws of Exchangeco and such additional documents and instruments as Exchangeco may reasonably require, including the Shareholder Documentation, and together with a duly executed Retraction Request:

(i) specifying that the holder desires to the Retracted Shares redeemed by Exchangeco;

(ii) stating the Retraction Date, provided that the Retraction Date shall be not less than 10 Business Days nor more than 15 Business Days after the date on which the Retraction Request is received by Exchangeco and further provided that, in the event that no such Business Day is specified by the holder in the Retraction Request, the Retraction Date shall be deemed to be the 15th Business Day after the date on which the Retraction Request is received by Exchangeco; and

(iii) acknowledging the Retraction Call Right of Pioneer Affiliate and Pioneer to purchase all but not less than all the Retracted Shares directly from the holder and that the Retraction Request shall be deemed to be a revocable offer by the holder to sell the Retracted Shares to Pioneer Affiliate or Pioneer, as applicable, in accordance with the Retraction Call Right on the terms and conditions set out in Section 2.3(c) below.

(b) Subject to the exercise by Pioneer Affiliate or Pioneer of the Retraction Call Right, upon receipt by Exchangeco in the manner specified in Section 2.3(a) hereof of a certificate or certificates representing the number of Class A Exchangeable Shares which the holder desires to have Exchangeco redeem, together with a Retraction Request, and provided that the Retraction Request is not revoked by the holder in the manner specified in Section 2.3(g), Exchangeco shall redeem the Retracted Shares effective at the close of business on the Retraction Date and shall cause to be delivered to such holder the total Retraction Price with respect to such shares, provided that all declared and unpaid dividends for which the record date has occurred prior to the Retraction Date shall be paid on the payment date for such dividends. If only a part of the Class A Exchangeable Shares represented by any certificate is redeemed (or purchased by Pioneer Affiliate or Pioneer pursuant to the Retraction Call Right), a new certificate for the balance of such Class A Exchangeable Shares shall be issued to the holder at the expense of Exchangeco.

(c) Upon receipt by Exchangeco of a Retraction Request, Exchangeco shall immediately notify Pioneer Affiliate and Pioneer thereof. In order to exercise the Retraction Call Right, Pioneer Affiliate or Pioneer, as applicable, must issue a Call Notice within five Business Days of notification to Pioneer Affiliate or Pioneer, as applicable, by Exchangeco of the receipt by Exchangeco of the Retraction Request. If Pioneer Affiliate or Pioneer, as applicable, does not so notify Exchangeco within such five Business Day period, Exchangeco will notify the holder as soon as possible, but no later than four Business Days, thereafter that Pioneer Affiliate and Pioneer will not exercise the Retraction Call Right. If Pioneer Affiliate or Pioneer, as applicable, gives the Call Notice within such five Business Day period, and provided that the Retraction Request is not revoked by the holder in the manner specified in Section 2.3(g), the Retraction Request shall thereupon be considered only to be an offer by the holder to sell the Retracted Shares to Pioneer Affiliate or Pioneer, as applicable, in accordance with the Retraction Call Right. In such event, Exchangeco shall not redeem the Retracted Shares and Pioneer Affiliate or Pioneer, as applicable, shall purchase from such holder and such holder shall sell to Pioneer Affiliate or Pioneer, as applicable, on the Retraction Date the Retracted Shares for an amount per Class A Exchangeable Share (the "**Retraction Purchase Price")** equal to the Market Price of a Pioneer Common Share on the last Business Day prior to the Retraction Date multiplied by the Exchange Ratio, which shall be satisfied in full by Pioneer or Pioneer Affiliate, as applicable, causing to be transferred to such holder the number of Pioneer Common Shares equal to the Exchange Ratio (for each Class A Exchangeable Share presented) plus to the extent not paid by Exchangeco, an additional amount equal to the Dividend Amount. For the purposes of completing a purchase pursuant to the Retraction Call Right, Pioneer Affiliate or Pioneer, as

applicable, shall deposit with Exchangeco, on or before the Retraction Date, certificates representing Pioneer Common Shares and a cheque or cheques of Pioneer Affiliate or Pioneer, as applicable, payable at par at any branch of the bankers of Pioneer Affiliate or Pioneer, as applicable, representing the aggregate Dividend Amount, less any amounts withheld on account of tax required to be deducted and withheld therefrom. Provided that Pioneer Affiliate or Pioneer, as applicable, has complied with the immediately preceding sentence, the closing of the purchase and sale of the Retracted Shares pursuant to the Retraction Call Right shall be deemed to have occurred as at the close of business on the Retraction Date and, for greater certainty, no redemption by Exchangeco of such Retracted Shares shall take place on the Retraction Date. In the event that neither Pioneer Affiliate or Pioneer delivers a Call Notice within such five Business Day period, and provided that the Retraction Request is not revoked by the holder in the manner specified in Section 2.3(g), Exchangeco shall redeem the Retracted Shares on the Retraction Date and in the manner otherwise contemplated in Article 6 of the Exchangeable Share Provisions.

(d) Exchangeco, Pioneer Affiliate or Pioneer, as the case may be, shall deliver to the relevant holder, at the address of the holder recorded in the securities register of Exchangeco for the Class A Exchangeable Shares or at the address specified in the holder's Retraction Request or by holding for pick-up by the holder at the registered office of Exchangeco, certificates representing the Pioneer Common Shares (which Shares shall be duly issued as fully paid and non-assessable and shall be free and clear of any lien, claim or encumbrance) registered in the name of the holder or in such other name as the holder may request, and, if applicable and on or before the payment date therefor, a cheque payable at par at any branch of the bankers of Exchangeco or Pioneer Affiliate, as applicable, representing the aggregate Dividend Amount in payment of the total Retraction Price or the total Retraction Purchase Price, as the case may be, in each case, less any amounts withheld on account of tax required to be deducted and withheld therefrom, and such delivery of such certificates and cheques on behalf of Exchangeco, Pioneer Affiliate or Pioneer, as the case may be, shall be deemed to be payment of and shall satisfy and discharge all liability for the total Retraction Price or total Purchase Price, as the case may be, to the extent that the same is represented by such share certificates and cheques (plus any tax deducted and withheld therefrom and remitted to the proper tax authority).

(e) On and after the close of business on the Retraction Date, the holder of the Retracted Shares shall cease to be a holder of such Retracted Shares and shall not be entitled to exercise any of the rights of a holder in respect thereof, other than the right to receive his proportionate part of the total Retraction Price or total Purchase Price, as the case may be, unless upon presentation and surrender of certificates in accordance with the foregoing provisions, payment of the total Retraction Price or the total Purchase Price, as the case may be, shall not be made as provided in Section 2.3(d), in which case the rights of such holder shall remain unaffected until the total Retraction Price or the total Purchase Price, as the case may be, has been paid in the manner hereinbefore provided. On and after the close

of business on the Retraction Date, provided that presentation and surrender of certificates and payment of the total Retraction Price or the total Purchase Price, as the case may be, has been made in accordance with the foregoing provisions, the holder of the Retracted Shares so redeemed by Exchangeco or purchased by Pioneer Affiliate or Pioneer, as applicable, shall thereafter be considered and deemed for all purposes to be a holder of the Pioneer Common Shares delivered to it.

(f) Notwithstanding any other provision of this Agreement or the Exchangeable Share Provisions, Exchangeco shall not be obligated to redeem Retracted Shares specified by a holder in a Retraction Request to the extent that such redemption of Retracted Shares would be contrary to solvency requirements or other provisions of applicable law. If Exchangeco believes that on any Retraction Date it would not be permitted by any of such provisions to redeem the Retracted Shares tendered for redemption on such date, and provided that Pioneer Affiliate and Pioneer shall not have exercised the Retraction Call Right with respect to the Retracted Shares, Exchangeco shall only be obligated to redeem Retracted Shares specified by a holder in a Retraction Request to the extent of the maximum number that may be so redeemed (rounded down to a whole number of shares) as would not be contrary to such provisions and shall notify the holder at least two Business Days prior to the Retraction Date as to the number of Retracted Shares which will not be redeemed by Exchangeco. In any case in which the redemption by Exchangeco of Retracted Shares would be contrary to solvency requirements or other provisions of applicable law, Exchangeco shall redeem the maximum number of Class A Exchangeable Shares which the Board of Directors determine Exchangeco is, on the Retraction Date, permitted to redeem, which shall be selected as nearly as may be pro rata (disregarding fractions) in proportion to the total number of Class A Exchangeable Shares tendered for retraction by each holder thereof and Exchangeco shall issue to each holder of Retracted Shares a new certificate, at the expense of Exchangeco, representing the Retracted Shares not redeemed by Exchangeco pursuant to 2.3(b) hereof. In the event the provisions of this paragraph 2.3(f) limit the retraction of the Retracted Shares, notice shall be given to the holder of Class A Exchangeable Shares and Pioneer of such restriction by Exchangeco. Upon receipt of the notice, the holder of Class A Exchangeable Shares may give a further written request within 5 days to Pioneer and Pioneer or a Pioneer Affiliate shall then be required to exercise the Call Option pursuant to paragraph 2.3(c) with respect to any Retracted Shares that have not been redeemed by Exchangeco.

(g) A holder of Retracted Shares may, by notice in writing given by the holder to Exchangeco before the close of business on the third Business Day immediately preceding the Retraction Date, withdraw its Retraction Request, in which event such Retraction Request shall be null and void and, for greater certainty, the revocable offer constituted by the Retraction Request to sell the Retracted Shares to Pioneer Affiliate or Pioneer shall be deemed to have been revoked.

ARTICLE 3
MISCELLANEOUS

3.1 Withholding Rights

Pioneer, Pioneer Affiliate and Exchangeco shall be entitled to deduct and withhold from the consideration otherwise payable to the Shareholder pursuant to this Agreement such amounts as Pioneer, Pioneer Affiliate or Exchangeco is required to deduct and withhold with respect to such payment under the United States Internal Revenue Code of 1986, as amended, the *Income Tax Act* (Canada), as amended, or any provision of state, provincial, local or foreign tax law. To the extent that amounts are so withheld, such withheld amounts shall be treated for all purposes hereof as having been paid to the Shareholder in respect of which such deduction and withholding was made, provided that such withheld amounts are actually remitted to the appropriate taxing authority. To the extent that the amount so required or permitted to be deducted or withheld from any payment to the Shareholder exceeds the cash portion of the consideration otherwise payable to the Shareholder, Pioneer, Pioneer Affiliate and Exchangeco are hereby authorized to sell or otherwise dispose of such portion of the consideration as is necessary to provide sufficient funds to Pioneer, Pioneer Affiliate or Exchangeco, as the case may be, to enable it to comply with such deduction or withholding requirement and Pioneer, Pioneer Affiliate or Exchangeco shall give an accounting to the Shareholder with respect thereto and any balance of such proceeds of sale.

3.2 Notice to Parties

All notices and other communications between the parties hereunder shall be in writing and shall be deemed to have been given if delivered personally or sent via email to the parties at the following addresses (or at such other address for such party as shall be specified in like notice):

(a) if to Exchangeco:

NCS Oilfield Services Canada, Inc.
2800, 715 - 5th Avenue SW
Calgary, Alberta T2P 2X6
Canada
Attention: Robert Nipper
Email: rnipper@ncsenergyservices.com

(b) if to Pioneer or Pioneer Affiliate:

c/o Advent International Corp.
75 State Street
Boston, MA 02109
United States of America
Attention: Guvinder Grewal; James Westra
Email: ggrewal@adventinternational.com;
jwestra@adventinternational.com

(c) if to the Shareholder:

3703 609-8th Street SW
Calgary, AB T2P 2A6
Canada
Attention: Marty Stromquist
Email: Marty@ncsenergyservices.com

Any notice or other communication given personally shall be deemed to have been given and received upon delivery thereof and if sent by email shall be deemed to have been given and received on the date of receipt thereof unless such day is not a Business Day in which case it shall be deemed to have been given and received upon the immediately following Business Day.

3.3 Time of the Essence

Time shall be of the essence of this Agreement and all of the provisions of this Agreement.

3.4 No Assignment

The Shareholder may not assign, transfer or otherwise convey the whole or any part of such Shareholder's rights or obligations under this Agreement to any person without the express written consent of Pioneer.

3.5 Successors

This Agreement shall be binding upon and shall enure to the benefit of the parties hereto, their heirs, legal representatives, successors and permitted assigns.

3.6 Further Assurances

Each of the parties shall do all such things and provide all such reasonable assurances as may be required to consummate the agreements and transactions contemplated hereby and each party shall execute and deliver such further documents or instruments required by any other party as may be reasonably necessary or desirable to effect the purpose of this Agreement and to carry out its provisions.

3.7 Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the Province of Alberta and the laws of Canada applicable therein.

3.8 Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which taken together shall constitute one and the same instrument.

3.9 Termination of the Original Call Rights Agreement

NCS US, Exchangeco and Shareholder agree that upon the execution of this Call Rights Agreement, the Original Call Rights Agreement will automatically terminate, without any further action by the parties thereto, and that all of the parties to the Original Call Rights Agreement will have no further rights or obligations thereunder.

[Signature pages to immediately follow]

IN WITNESS WHEREOF the parties have duly executed this Agreement.

NCS ENERGY HOLDINGS, LLC

Per: /s/ Mark Ludwig
Name: Mark Ludwig
Title: Vice President

[SIGNATURE PAGE TO AMENDED CALL RIGHTS AGREEMENT]

PIONEER SUPER HOLDINGS, INC.

Per: /s/ Gurinder Grewal
Name: Gurinder Grewal
Title: Vice President

[SIGNATURE PAGE TO AMENDED CALL RIGHTS AGREEMENT]

NCS OILFIELD SERVICES CANADA, INC.

Per: /s/ Robert Nipper
Name: Robert Nipper
Title: President

[SIGNATURE PAGE TO AMENDED CALL RIGHTS AGREEMENT]

CEMBLEND SYSTEMS INC.

Per: /s/ Marty Stromquist
Name: Marty Stromquist
Title: Chief Executive Officer

[SIGNATURE PAGE TO AMENDED CALL RIGHTS AGREEMENT]

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in this Registration Statement on Form S-1 of NCS Multistage Holdings, Inc. of our report dated March 9, 2017, except for the effects of the stock split described in Note 17 to the consolidated financial statements, as to which the date is April 17, 2017, which appears in such Registration Statement. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

Houston, Texas
April 17, 2017