2018 ANNUAL REPORT



PERMA-PIPE®

TURNING THE CORNER



THE 2018-19 YEAR REFLECTS THE SUCCESSFUL COMMENCEMENT OF OUR TURNAROUND PLAN TO BRING THE COMPANY BACK TO PROFITABILITY. THE FINANCIAL RESULTS HAVE BEGUN TO REFLECT THE IMPACT OF OUR EFFORTS TO INTRODUCE IMPROVED PROCESSES AND INVEST IN TALENT DEVELOPMENT, AND WE ARE BUILDING ON A POSITION TO CONTINUE THIS POSITIVE MOMENTUM INTO THE FUTURE.

DAVID J. MANSFIELD Chief Executive Officer

TO OUR STOCKHOLDERS:

While our full year result achieved only a modest level of pre-tax profit, the improvement versus the prior year result was significant. It is reassuring that these improvements were achieved in all of our regions through increased revenues, improved margins, and reduced overheads. By realigning and focusing on taking a strategic approach to our decisions, we have been able to achieve improved outcomes and have begun to build a solid foundation to continue forward. With increased bookings achieved during the year, our backlog reached record levels. At the end of the year, the backlog reflected an increase of 30% on the opening position in January, therefore giving us a stronger basis going into 2019.

Underscoring the positive achievements is the backdrop within which these events have developed. We have continued to operate considerately within the parameters of reduced overheads and available resources. Also, we began the year with a positive influence on the macro-economic drivers of our industry, with oil prices finally beginning to show a recovery from a depressed position. However, in response to fears of global oversupply and retrenchment in economic



growth, there was a dramatic decline of over 40% after October. At the end of our financial year, the oil price was down 15% compared to the price at the beginning of the year.







The year developed very much in line with our plans and expectations during the first three quarters. Our levels of activity increased in all regions, particularly in the Middle East and India, and in our PermAlert leak detection business that increased its contributed earnings by more than 250% above the prior year. During the final quarter, achieving our financial targets for the year became more challenging due to client-driven delays to project schedules on two major projects in the Middle East. These delays extended beyond January 31, so this adversely impacted our financial result for the year.

We have made positive steps to move our corporate culture to one where we are sharing resources and knowledge across all geographic areas, and this will be a continuing focus, along with improved succession and talent development plans. Some significant organizational changes occurred during the year that we believe will be an important driver in achieving the cultural and developmental changes we are pursuing. In August, John Carusiello retired from the position of Senior Vice President – Americas and was succeeded in the position by Scott James. In November, Bryan Norwood joined the Company in the position of Chief Financial Officer to replace Karl Schmidt who also retired at that time. I would like to thank both John and Karl for their many contributions over the years and to wish them well in their retirement. And I am pleased to welcome Scott and Bryan to our senior management team where I know they will have a very positive impact.

We have made excellent progress during the year with our initiative to enhance our Health Safety and Environmental performance and culture, and have now initiated all personnel to the program at all of our operating locations. We continue to see regular improvements and an increased level of participation and ownership amongst our employees, and I am confident that we can maintain this momentum of continuous improvement and maintain best-in-class industry standards.

While the revenues achieved in 2018 were below our targeted levels, they did reflect a 23% increase on 2017. Had it not been for the project delays in the Middle East, we believe we would have achieved the targets we set ourselves. As we have seen in the past, clients' project schedules are very fluid in the Middle East region and delays of this kind are very common.

It is notable that with a \$23.7 million increase in revenues versus 2017, we are able to report an increase of \$12.4 million in EBIT. This is demonstrative of improving margins and reduced overheads, both of which were specific strategic objectives for us during the year. We will continue these efforts into 2018, seeking to add resources only where there is a clear opportunity for acceptable returns.

Last year I noted that there appeared to be signs that our market drivers would continue in a positive direction and that our markets would continue to recover, particularly in Saudi Arabia where some of the previously stalled large projects could begin to resume. We did see this occur to a modest degree during 2018 and we are hopeful that this trend will gain further traction throughout the coming year.

Also last year, I discussed that we were targeting to execute on new growth plans during 2018 and anticipated a move to expand geographically into a new market with considerable promise. The timing of these plans was delayed beyond our original expectations, but I am now very pleased to say that in the forthcoming months we expect to establish a new production facility in Egypt, where there has begun some very significant construction developments, with plans to continue to develop infrastructure for years to come.

I have discussed in the past the project in East Africa that the Company is pursuing and the delays that have occurred in the client's expected schedule. After a period of inactivity during quarters two and three last year, the client has now resumed their engagement with potential suppliers and appears to be progressing once again. In addition, we have also been engaged in pursuing an additional significant project in East Africa that is currently in the design phase. We currently expect both of these projects to receive the 'green light' to move forward during 2019.

Some of our primary objectives during 2019 will be to continue to develop our organizational strength and structure in a manner that enables us to improve our effectiveness and further develop a culture of ownership and accountability. This will include a focus on personnel development, strategic thinking, and the implementation of proven processes and systems.

As always, I would like to thank our Board of Directors for their continued support and encouragement. It is a pleasure working with a team that is aligned in its vision and that operates in such a complementary manner. In addition, I would like to thank Mark Zorko, who resigned from the Board on February 1, for his many years of service, and to welcome Cindy Boiter as a newly joined member. I look forward to her contributions to help guide us in the future.

Each year I have noted that we are fortunate to have many talented, experienced and dedicated employees in our organization, and how they demonstrate their capabilities, resilience, and loyalty. This year is no exception to that, and I believe I can point to the achieved results as evidence of this. Without their effort and persistence, none of these results would have been possible. I extend my sincere thanks and congratulations to all of you that contributed to these achievements.

Sincerely,

DAVID J. MANSFIELD Chief Executive Officer Perma-Pipe International Holdings, Inc.

PERMA-PIPE®

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

FORM 10-K

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

For the fiscal year ended January 31, 2019

Commission File No. 0-18370

Perma-Pipe International Holdings, Inc.

(Exact name of registrant as specified in its charter)



Delaware

36-3922969

(State or other jurisdiction of incorporation or organization)

6410 W. Howard Street, Niles, Illinois

(Address of principal executive offices) (847) 966-1000

(I.R.S. Employer Identification No.)

60714

(Zip Code)

(Registrant's telephone number, including area code) Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Stock, \$.01 par value per share

The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes □ No ⊠ Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ⊠ No □ Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ⊠ No □ Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. 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

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes \square No \boxtimes

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant (the exclusion of the market value of the shares owned by any person shall not be deemed an admission by the registrant that such person is an affiliate of the registrant) was \$68,544,111.75 based on the closing sale price of \$9.05 per share as reported on the NASDAQ Global Market on July 31, 2018.

complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \square

The number of shares of the registrant's common stock outstanding at April 10, 2019 was 7,883,522.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its 2019 annual meeting of stockholders, which will be filed with the Securities and Exchange Commission within 120 days after January 31, 2019, are incorporated by reference in Part III of this Form 10-K.

Perma-Pipe International Holdings, Inc.

FORM 10-K

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PERMA-PIPE®

PART I

Cautionary Statements Regarding Forward Looking Information

Certain statements contained in this Annual Report on Form 10-K, which can be identified by the use of forward-looking terminology such as "may," "will," "expect," "continue," "remains," "intend," "aim," "should," "prospects," "could," "future," "potential," "believes," "plans," "likely," and "probable," or the negative thereof or other variations thereon or comparable terminology, constitute "forward-looking statements," within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934 as amended ("Exchange Act") and are subject to the safe harbors created thereby. These statements should be considered as subject to the many risks and uncertainties that exist in the Company's operations and business environment. Such risks and uncertainties could cause actual results to differ materially from those projected as a result of many factors, including, but not limited to, the following:

- the Company's ability to effectively execute its strategic plan and achieve profitability and positive cash flows;
- the impact of global economic weakness and volatility;
- fluctuations in steel prices and the Company's ability to offset increases in steel prices through price increases in its products;
- the timing of orders for the Company's products;
- decreases in United States government spending on projects using the Company's products, and challenges to the Company's non-government customers' liquidity and access to capital funds;
- the Company's ability to successfully negotiate progress-billing arrangements for its large contracts;
- fluctuations in crude oil and natural gas prices;
- risks and uncertainties related to the Company's international business operations;
- the Company's ability to repay its debt and renew expiring international credit facilities;
- aggressive pricing by existing competitors and the entrance of new competitors in the markets in which the Company operates;
- the Company's ability to purchase raw materials at favorable prices and to maintain beneficial relationships with its suppliers;
- the Company's ability to manufacture products free of latent defects and to recover from suppliers who may provide defective materials to the Company;
- reductions or cancellations of orders included in the Company's backlog;
- the Company's ability to attract and retain senior management and key personnel;
- the Company's ability to achieve the expected benefits of its growth initiatives;
- the Company's ability to interpret changes in tax regulations and legislation;
- reversals of previously recorded revenue and profits resulting from inaccurate estimates made in connection with the Company's percentage-of-completion revenue recognition;
- the Company's failure to establish and maintain effective internal control over financial reporting; and
- the impact of cybersecurity threats on the Company's information technology systems.

Item 1. BUSINESS

Perma-Pipe International Holdings, Inc., collectively with its subsidiaries ("PPIH", "Company" or "Registrant"), is engaged in the manufacture and sale of products in one reportable segment: Piping Systems. The Company was incorporated in Delaware on October 12, 1993. The Company's common stock is reported under ticker symbol "PPIH". The Company's fiscal year ends on January 31. Years and balances described as 2018 and 2017 are for the fiscal years ended January 31, 2019 and 2018, respectively.

Products and services. The Company engineers, designs, manufactures and sells specialty piping systems, and leak detection systems. Specialty piping systems include: (i) insulated and jacketed district heating and cooling ("DHC") piping systems for efficient energy distribution from central energy plants to multiple locations, (ii) primary and secondary containment piping systems for transporting chemicals, hazardous fluids and petroleum products, and (iii) the coating and/or insulation of oil and gas gathering and transmission pipelines. The Company's leak detection systems are sold with its piping systems or on a stand-alone basis, to monitor areas where fluid intrusion may contaminate the environment, endanger personal safety, cause a fire hazard, impair essential services or damage equipment or property.

1

The Company frequently engineers and custom fabricates to job site dimensions and incorporates provisions for thermal expansion due to cycling temperatures. This custom fabrication helps to minimize the amount of field labor required by the installation contractor. Most of the Company's piping systems are produced for underground installations and, therefore, require trenching, which is the responsibility of the general contractor, and completed by unaffiliated installation contractors.

The Company's piping systems are typically sold as a part of large discrete projects, and both the domestic and Canadian customer demand varies by season. See "Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A")."

Operating Facilities: The Company operates its business from the following locations:

Perma-Pipe, Inc.
Niles, IL
New Iberia, LA
Lebanon, TN
Perma-Pipe Canada, Ltd.
Camrose, Alberta, Canada

Perma-Pipe Middle East FZC
Fujairah, United Arab Emirates
Perma-Pipe Saudi Arabia, LLC
Dammam, Kingdom of Saudi Arabia
Perma-Pipe India Pvt. Ltd
Gandhidham, India

Customers and sales channels. The Company's customer base is industrially and geographically diverse. In the United States, the Company employs inside and outside sales managers who use and assist a network of independent manufacturers' representatives, none of whom sell products that are competitive with the Company's piping systems. The Company employs a direct sales force in Canada and in several countries in the Middle East to market and sell products and services. On a country by country basis, and where advantageous, an agent network is often used to assist in marketing and selling the Company's products and services.

On January 31, 2019 and January 31, 2018, no one customer accounted for more than 10% of the Company's net sales.

Three customers accounted for 42.0% and 34.9% of accounts receivable on January 31, 2019 and 2018, respectively.

Backlog. The Company's backlog on January 31, 2019 was \$61.0 million compared to \$46.7 million on January 31, 2018, most of which is expected to be completed within the next 12 months. The Company defines backlog as the revenue value resulting from confirmed customer purchase orders that have not yet been recognized as revenue. However, by industry practice, orders may be canceled or modified at any time. If a customer cancels an order, the customer is normally responsible for all finished goods produced or shipped, all direct and indirect costs incurred and also for a reasonable allowance for anticipated profits. No assurance can be given that these amounts will be recovered after cancellation. Any cancellation or delay in orders may result in lower than expected revenue.

Intellectual property. The Company owns patents covering its piping and electronic leak detection systems. The patents are not material to the Company either individually or in the aggregate because the Company believes its sales would not be materially reduced if patent protection were not available. The Company owns numerous trademarks connected with its piping and leak detection systems including the following U.S. trademarks: Perma-Pipe®, Chil-Gard®, Double Quik®, Escon-A®, FluidWatch®, Galva-Gard®, Polytherm®, Pal-AT®, LiquidWatch®, PalCom®, Xtru-therm®, Auto-Therm®, Multi-Therm®, Ultra-Therm®, Cryo-Gard®, Sleeve-Gard®, Electro-Gard® and Sulphur-Therm®. The Company also owns a number of trademarks throughout the world. Some of the Company's more significant trademarks include: Auto-Therm®, Cryo-Gard®, Electro-Gard®, Sleeve-Gard®, Permalert®, Pal-AT®, Perma-Pipe®, Polytherm®, Sulphur-Therm®, Ric-Wil®, and Xtru-therm®.

Suppliers. The basic raw materials used in production are pipes and tubes made of carbon steel, steel alloys, copper, ductile iron, or polymers and various chemicals such as polyols, isocyanate, urethane resin, polyethylene and fiberglass, mostly purchased in bulk quantities. The Company believes there are currently adequate supplies and sources of availability of these needed raw materials. Steel prices began to rise in early 2018 and are expected to continue to rise in 2019. The Company expects normal seasonal price movement during 2019 with steel prices higher than average when compared to 2018. The Company has been updating its quoting system for the movements in steel prices and expects to recover these price differentials through price increases in its products.

The sensor cables used in the Company's leak detection and location systems are manufactured to the Company's specifications by companies regularly engaged in manufacturing such cables. The Company owns patents for some of the features of its sensor cables. The Company assembles the monitoring component of its leak detection and location systems from components purchased from many sources.

Competition. The piping systems market is highly competitive. The Company believes its principal competition consists of over 20 major competitors and more small competitors. The Company believes that quality, service, engineering design capabilities and

support, a comprehensive product line, timely execution, plant location and price are key competitive factors. The Company also believes it has a more comprehensive product line than any competitor.

Research and Development. The Company maintains a standalone research and development function and primarily focuses on activities and development to meet product specifications mandated by its customers and the industry.

Government regulation. The demand for the Company's leak detection and location systems and secondary containment piping systems, which is a small percentage of the Company's total annual piping sales, is driven by federal and state environmental regulation with respect to hazardous waste. The U.S. Federal Resource Conservation and Recovery Act requires, in some cases, that the storage, handling and transportation of fluids through underground pipelines feature secondary containment and leak detection. The U.S. National Emission Standard for hydrocarbon airborne particulates requires reduction of airborne volatile organic compounds and fugitive emissions. Under this regulation, many major refineries are required to recover fugitive vapors and dispose of the recovered material in a process sewer system, which then becomes a hazardous secondary waste system that must be contained. Although there can be no assurances as to the ultimate effects of these governmental regulations, the Company believes such regulations may increase the demand for its piping systems products.

In the United States and Canada, federal government regulations require that all buried pipelines that cross state or provincial boundaries or the United States-Canada border, have an anti-corrosion coating system applied. The Company believes that this regulation has a positive effect on demand for its products due to the Company's unique expertise with respect to anti-corrosion coating.

Employees

As of January 31, 2019, the Company had approximately 193 employees working in the United States, of which approximately 74 were under two collective bargaining agreements, one expiring on March 31, 2022, and the other on April 30, 2020. There were approximately 508 employees working at the Company's international locations. The Company considers its relationship with its employees to be good.

Available Information

The Company files with and furnishes to the Securities and Exchange Commission ("SEC"), reports including annual meeting materials, Annual Reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, as well as amendments thereto. The Company maintains a website, www.permapipe.com, where these reports and related materials are available free of charge as soon as reasonably practicable after the Company electronically delivers such material to the SEC. The information on the Company's website is not part of this Annual Report on Form 10-K and is not incorporated into this or any other filings by the Company with the SEC.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth information regarding the executive officers of the Company as of April 1, 2019:

		Executive officer of the
Name	Offices and Positions; Age	Company since
David J. Mansfield	Director, President and Chief Executive Officer; Age 58	2016
D. Bryan Norwood	Vice President and Chief Financial Officer; Age 63	2018
Wayne Bosch	Vice President, Chief Human Resources Officer; Age 62	2013

David J. Mansfield: President and Chief Executive Officer ("CEO") since November 2016. From 2015 to 2016, Mr. Mansfield served as Chief Financial Officer ("CFO") of Compressor Engineering Corp. & CECO Pipeline Services Co., which provides products and services to the gas transmission, midstream, gas processing, and petrochemical industries. In this position, he had overall responsibility for the group's financial affairs, including the development and execution of turnaround plans and the successful negotiation of a corporate refinancing. From 2009 to 2014, Mr. Mansfield served as CFO and as Acting CEO of Pipestream, Inc., a venture capital-owned technology development company providing a suite of products to the oil and gas pipeline industry. From 1992 to 2009, Mr. Mansfield was employed with Bredero Shaw, the world's largest provider of protective coatings for the oil and gas pipeline industry, most recently as Vice President Strategic Planning. During his tenure with Bredero Shaw, Mr. Mansfield served in numerous roles including Vice President Controller and Commercial General Manager, Europe, Africa & FSU, and played a key role in strategy development and merger and acquisition activities as the company grew from annual revenues of \$100 million to over \$900 million.

D. Bryan Norwood: Appointed Vice President and Chief Financial Officer in November 2018. From 2014 to 2018 Mr. Norwood served as CFO of API Perforating, LLC an oilfield service company providing stage perforation and wireline services. From 2012 to 2014, Mr. Norwood served as CFO of Dupre' Energy Services, LLC an oilfield service company offering multiple services lines. From 2010 to 2012, Mr. Norwood was Vice President Finance for the Environmental Services Division of PSC, LLC a hazardous waste disposal company. From 1992 to 2010, Mr. Norwood has held several senior leadership positions including CFO of Smith Equipment Rental and Services, LLC., a regional oilfield service provider, Vice President and Treasurer of Key Energy Services, Inc., an oilfield multi-service provider, and Corporate Controller and Vice President Finance-Americas with Bredero Shaw, a global pipe coating provider.

Wayne Bosch: Appointed Vice President and Chief Human Resources Officer in December 2013. From 2010 to 2012, Mr. Bosch was Vice President of Human Resources at Pactiv, a \$4.0 billion global manufacturer and distributor of food packaging products. Prior to Pactiv, he led the human resource activities at the North American segment of Barilla America, a \$6.3 billion global pasta, sauces and bakery manufacturer and was the Chief Human Resources Officer for water filtration leader Culligan International. Mr. Bosch's background spans the entire spectrum of human resources competencies, including mergers and acquisition and business integration, in start-up, turnaround and high-growth businesses. His scope also includes communications, legal, occupational health services, health safety environment, risk management, payroll, facilities and general administrative services.

Item 1A. RISK FACTORS

The Company's business, financial condition, results of operations and cash flows are subject to various risks, including, but not limited to, those set forth below, which could cause actual results to vary materially from recent results or from anticipated future results. These risk factors should be considered together with information included elsewhere in this Annual Report on Form 10-K.

The Company has incurred net losses for its past two fiscal years and it may be unable to achieve profitability or positive cash flows in the future. The Company has experienced net losses for the past two fiscal years. Generating net income and positive cash flows in the future will depend on its ability to successfully complete and execute its strategic plan. There is no guarantee that the Company will be able to achieve profitability or positive cash flows in the future. The Company's inability to successfully achieve profitability and positive cash flows may result in it experiencing a serious liquidity deficiency resulting in material adverse consequences that could threaten its viability.

Global economic weakness and volatility may adversely affect operating margins for the Company's services and products. If the global economy experiences a severe and prolonged downturn, it could adversely impact the Company's business, directly or indirectly. Downturns in such general economic conditions can significantly affect the business of the Company's customers, which in turn affects demand, volume, pricing, and operating margins for the Company's services and products. A downturn in one or more of the Company's significant markets could have a material adverse effect on the Company's business, results of operations or financial condition. Because economic and market conditions vary within the Company's geographic regions, the Company's performance will also vary. In addition, the Company is exposed to fluctuations in currency exchange rates and commodity prices, including rising steel prices and surcharges.

Fluctuations in the availability of, and price of steel, may affect the Company's results of operations. The steel industry is highly cyclical in nature, and at times, pricing can be highly volatile due to a number of factors beyond the Company's control, including general economic conditions, import duties, other trade restrictions and currency exchange rates. This volatility may negatively impact market conditions thus reducing project activity.

Through a series of Presidential Proclamations pursuant to Section 232 of the Trade Expansion Act of 1962, as of the date of this filing, U.S. imports of certain steel products are subject to a 25 percent tariff (exceptions are Australia, Argentina, Brazil and South Korea), with retaliatory tariffs imposed by importing countries. The Company expects these actions to increase steel costs and decrease supply availability. We routinely insulate steel pipe for our Canadian customers, and these tariffs may lead to project delays or cancellations while they are in place.

The Company regularly updates its quoting system for the movements in steel prices, and intends to recover these price differentials through price increases in the Company's products, however, the Company may not always be successful. Any increase in steel prices that is not offset by an increase in the Company's prices could have an adverse effect on the Company's business, financial position, results of operations or cash flows. In addition, if the Company is unable to acquire timely steel supplies, it may need to decline bid and order opportunities, which could also have an adverse effect on the Company's business, financial position, results of operations or cash flows.

Delays in the timing of orders for the Company's products may negatively impact the Company's operating results. Since the Company's revenues are based on discrete projects, the Company's operating results in any reporting period could be negatively impacted as a result of large variations in the level of overall market demand or delays in the timing of project execution phases.

Decreases in government spending on projects using the Company's products, and challenges to the Company's non-government customers' liquidity and availability of capital funds may adversely impact demand for the Company's products. Uncertainty about economic market conditions poses risks that the Company's customers may postpone spending for capital improvement and maintenance projects in response to tighter credit markets or negative financial news, which could have a material negative effect on the demand for the Company's products. Decreases in U.S. federal and state spending on projects using the Company's products can have negative impact on sales volume from the Company's domestic facilities. Governmental spending on large infrastructure projects in the Gulf Cooperation Council ("GCC") countries vary and spending has in the past been curtailed or delayed as a result of reduced public spending budgets in countries which are dependent on oil and gas revenues and their respective price levels.

The Company may not be able to successfully negotiate progress-billing arrangements for its large contracts, which could adversely impact the Company's working capital needs and credit risk. The Company sells systems and products under contracts that allow the Company to either bill upon the completion of certain agreed upon milestones, or upon actual shipment of the system or product. The Company attempts to negotiate progress-billing milestones on large contracts to help manage its working capital and to reduce the credit risk associated with these large contracts. Consequently, shifts in the billing terms of the contracts in the backlog from period to period can increase the Company's requirements for working capital and can increase its exposure to credit risk.

Crude oil and natural gas prices are volatile, and the substantial and extended decline in commodity prices has had, and may continue to have, a material and adverse effect on demand and pricing in the Company's business. Prices for crude oil and natural gas fluctuate widely. Among the factors that can or could cause these price fluctuations are:

- the level of consumer demand;
- domestic and worldwide supplies of crude oil and natural gas;
- domestic and international drilling activity;
- the actions of other crude oil exporting nations and the Organization of Petroleum Exporting Countries;
- worldwide economic and political conditions, including political instability or armed conflict in oil and gas producing regions; and
- the price and availability of, and demand for, competing energy sources, including alternative energy sources.

Generally, when the prices for crude oil and natural gas are higher, demand for the Company's products increases and the Company is able to negotiate higher prices. On the other hand, when the prices of crude oil and natural gas are lower, demand for the Company's products decreases and the Company is forced to compete with lower prices and other concessions. Volatility in these commodity prices can also result in circumstances where demand for the Company's products is suddenly high, but the Company is unable to negotiate higher prices, thereby adversely impacting the Company's margins and capacity to accept new projects at higher margins.

The Company may be unable to repay its debt or renew its expiring credit facilities. If there were an event of default under the Company's current revolving credit facilities, the lenders could cause all amounts outstanding with respect to that debt to be due and payable immediately. The Company cannot assure that its cash flow will be sufficient to fully repay amounts due under any of the financing arrangements, if accelerated upon an event of default, or, that the Company would be able to repay, refinance or restructure the payments under any such arrangements. Complying with the covenants under the Company's domestic and/or foreign revolving credit facilities may limit management's discretion by restricting options such as:

- incurring additional debt;
- entering into transactions with affiliates;
- · making investments or other restricted payments;
- repurchase of Company's shares;
- payment of dividends, capital returns, repayment of intercompany obligations and other forms of repatriation; and
- · creating liens.

The Company' credit arrangements used by its Middle Eastern subsidiaries are renewed on an annual basis. In addition to these credit arrangements, the Company also obtains project financing in the Middle East on a project-by-project basis. While the Company believes that it will be able to renew its Middle East credit arrangements and will have continued access to individual project financing, there is no assurance that such arrangements will be renewed or made available in similar amounts or be on similar terms and conditions as the current arrangements, or that such individual project financing will be available for projects that the Company is interested in pursuing.

Any replacement credit arrangements outside of the United States may further limit the Company's ability to repatriate funds from abroad. Repatriation of funds from certain countries may become limited based upon regulatory restrictions or economically unfeasible because of the taxation of funds when moved to another subsidiary or to the parent company. In addition, any refinancing,

replacement or additional financing the Company may obtain could contain similar or more restrictive covenants than the Company is currently subject to. The Company's ability to comply with any covenants may be adversely affected by general economic conditions, political decisions, industry conditions and other events beyond management's control.

Aggressive pricing by existing competitors and the entrance of new competitors in the markets in which the Company operates could drive down the Company's profits and prohibit or slow the Company's growth. The Company's business is highly competitive. Some of the Company's competitors are larger and have more resources than the Company. Additionally, many of the Company's products are also subject to competition from alternative technologies and alternative products. In periods of declining demand, the Company's fixed cost structure may limit its ability to cut costs, which may be a competitive disadvantage compared to firms with more flexible cost structures, or may result in reduced operating margins and operating losses.

The Company may be unable to purchase raw materials at favorable prices, or maintain beneficial relationships with its suppliers, which could result in a shortage of supply, or increased pricing. To the extent the Company relies upon a single source for key components of several of its products, the Company believes there are alternate sources available for such components. However, there can be no assurance that the interruption of supplies of such components would not have an adverse effect on the financial condition of the Company and that the Company, if required to do so, would be able to negotiate agreements with alternative sources on acceptable terms.

The Company may be subject to claims for damages for defective products. The Company warrants its products to be free of certain defects. The Company has, from time to time, had claims alleging defects in its products. The Company cannot be certain it will not experience material product liability losses in the future or that it will not incur significant costs to defend such claims. While the Company currently has product liability insurance, the Company cannot be certain that its product liability insurance coverage will be adequate for liabilities that may be incurred in the future or that such coverage will continue to be available to the Company on commercially reasonable terms. Any claims relating to defective products that result in liabilities exceeding the Company's insurance coverage could have an adverse effect on the Company's business, financial position, results of operations or cash flows.

Product and service orders included in the Company's backlog may be reduced or cancelled. The Company defines backlog as the revenue value resulting from confirmed customer purchase orders that have not yet been recognized as revenue. However, by industry practice, orders may be canceled or modified at any time. If a customer cancels an order, the customer is normally responsible for all finished goods produced or shipped, all direct and indirect costs incurred and also for a reasonable allowance for anticipated profits. No assurance can be given that these amounts will be recovered after cancellation. Any cancellation or delay in orders may result in lower than expected revenue.

The Company may be unable to attract and retain its senior management and key personnel. The Company's ability to meet its strategic and financial goals will depend to a significant extent on the continued contributions of its senior management and key personnel. Future success will also depend in large part on the Company's ability to identify, attract, motivate, effectively utilize and retain highly qualified managerial, sales, marketing and technical personnel. The loss of senior management or other key personnel or the inability to identify, attract and retain qualified personnel in the future could make it more difficult to manage the Company's business and could adversely affect operations and financial results.

The Company may not be able to achieve the expected benefits from its growth initiatives. The Company's cyclical or general expansion may result in unanticipated adverse consequences, including significant strain on management, operations and financial systems as well as on the Company's ability to attract and retain competent employees. In the future, the Company may seek to grow its business by investing in new or existing facilities, making acquisitions, entering into partnerships and joint ventures, or constructing new facilities, which could entail a number of additional risks, including:

- strain on working capital;
- diversion of management's attention away from other activities, which could impair the operation of existing businesses;
- failure to successfully integrate the acquired businesses or facilities into existing operations;
- inability to maintain key pre-acquisition business relationships;
- loss of key personnel of the acquired business or facility;
- exposure to unanticipated liabilities; and
- failure to realize efficiencies, synergies and cost savings.

As a result of these and other factors, including general economic risks, the Company may not be able to realize the expected benefits from future acquisitions, new facility developments, partnerships, joint ventures or other investments.

The Company's financial results could be adversely affected by changes in international regulations and other activities of U.S. and non-U.S. governmental agencies related to the Company's international operations. International sales represent a significant portion of the Company's total sales. The Company's sales to foreign customers increased to 61.0% in 2018 from 59.5% in 2017.

The Company's anticipated growth and profitability may require increasing current foreign sales volume and may necessitate further international expansion. The Company's financial results could be affected by changes in trade, monetary and fiscal policies, laws and regulations, other activities of U.S. and non-U.S. governments, agencies and similar organizations, and other factors. These factors include, but are not limited to, changes in a country's or region's economic or political conditions, trade regulations affecting production, pricing and marketing of products, local labor conditions and regulations, reduced protection of intellectual property rights in some countries, changes in the regulatory or legal environment, restrictions on currency exchange activities, burdensome taxes and tariffs and other trade barriers. International risks and uncertainties, including changing social and economic conditions as well as terrorism, political hostilities and war, could lead to reduced international sales and reduced profitability associated with such sales. In addition, these risks can include extraordinarily delayed collections of accounts receivable. Because the Company conducts a significant portion of its business activities in the Middle East, the political and economic events of the countries that comprise the GCC can have a material effect on the Company's business.

Due to the international scope of the Company's operations, it is subject to a complex system of commercial and trade regulations around the world. Recent years have seen an increase in the development and enforcement of laws regarding trade compliance anticorruption, such as the U.S. Foreign Corrupt Practices Act and similar laws from other countries as well as new regulatory requirements regarding data privacy. The Company's foreign subsidiaries are governed by laws, rules and business practices that differ from those of the U.S. If the activities of these entities do not comply with U.S. laws or business practices or the Company's Code of Business Conduct, then violations of these laws may result in severe criminal or civil sanctions, which could disrupt the Company's business, and result in an adverse effect on the Company's reputation, business and results of operations or financial condition. The Company cannot predict the nature, scope or effect of future regulatory requirements to which its operations might be subject or the manner in which existing laws might be administered or interpreted.

The Company may be impacted by interpretations and changes in tax regulations and legislation which could adversely affect the Company's financial results. Tax interpretations, regulations and legislation in the various jurisdictions in which the Company operates are subject to measurement uncertainty and the interpretations can impact net income, income tax expense or recovery, and deferred income tax assets or liabilities. Tax rules and regulations, including those relating to foreign jurisdictions, are subject to interpretation and require judgment by the Company that may be challenged by the applicable taxation authorities upon audit. Although the Company believes its assumptions, judgements and estimates are reasonable, changes in tax laws or the Company's interpretation of tax laws and the resolution of any tax audits could significantly impact the amounts provided for income taxes in the Company's consolidated financial statements.

The Company may not be able to recover costs and damages from vendors that supply defective materials. The Company may receive defective materials from its vendors that are incorporated into the Company's products during the manufacturing process. The cost to repair, remake or replace defective products could be greater than the amount that can be recovered from the vendor. Such excess costs could have an adverse effect on the Company's business, financial position, results of operations or cash flows.

The Company may be required to reverse previously recorded revenue and profits as a result of inaccurate estimates made in connection with the Company's percentage-of-completion revenue recognition. The Company recognizes revenues under its stated revenue recognition policy except for sizable domestic complex contracts that require periodic recognition of income. For these contracts, the Company uses the "percentage of completion" accounting method. This methodology allows revenue and profits to be recognized proportionally over the life of a contract by comparing the amount of the cost incurred to date against the total amount of cost expected to be incurred. The effect of revisions to revenue and total estimated cost is recorded when the amounts are known or can be reasonably estimated. These revisions can occur at any time and could be material. On a historical basis, management believes that reasonably reliable estimates of the progress towards completion on long-term contracts have been made. However, given the uncertainties associated with these types of contracts, it is possible for actual cost to vary from estimates previously made, which may result in reductions or reversals of previously recorded revenue and profits.

The Company's failure to establish and maintain effective internal control over financial reporting could harm its business and financial results. The Company's management is responsible for establishing and maintaining effective internal control over financial reporting. Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with accounting principles generally accepted in the United States. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that the Company would prevent or detect a misstatement of its financial statements or fraud.

The Company's information technology systems may be negatively affected by cybersecurity threats. The Company faces risks relating to cybersecurity attacks that could cause the loss of confidential information and other business disruptions. The Company relies extensively on computer systems to process transactions and manage its business, and its business is at risk from and may be impacted by cybersecurity attacks. These could include attempts to gain unauthorized access to data and computer systems. Attacks can be both individual and/ or highly organized attempts organized by very sophisticated hacking organizations. The Company employs a number of measures to prevent, detect and mitigate these threats, which include password encryption, frequent password

change events, firewall detection systems, anti-virus software in-place and frequent backups; however, there is no guarantee such efforts will be successful in preventing a cyber-attack. A successful attack could disrupt and otherwise adversely affect the Company's reputation and results of operations, including through lawsuits by third-parties.

Item 1B. UNRESOLVED STAFF COMMENTS - None.

Item 2. PROPERTIES

Location	Leased or Owned	Size
Illinois	Leased production facilities and office space	31,650 square feet
Louisiana	Owned production facilities and leased land	30,000 square feet on approximately 5 acres
Tennessee	Owned production facilities and office space	131,800 square feet on approximately 23.5 acres
Texas	Leased office space	2,100 square feet
Canada	Owned production facilities with office space on owned land, leased land and leased office space	102,980 square feet on approximately 158 acres
India	Leased production facilities, office space and land	33,700 square feet on approximately 1.2 acres
Kingdom of Saudi Arabia	Owned production facilities on leased land	89,000 square feet on approximately 11 acres
United Arab Emirates	Leased office space and production facilities on leased land	182,100 square feet on approximately 16.4 acres

For further information, see Note 7 - Lease information, in the Notes to Consolidated Financial Statements.

Item 3. LEGAL PROCEEDINGS - As of January 31, 2019, the Company had no material pending litigation.

Item 4. MINE SAFETY DISCLOSURES - Not applicable.

PART II

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

The Company's common stock is traded on the Nasdaq Global Market under the symbol "PPIH".

As of April 3, 2019, there were approximately 60 stockholders of record and other additional stockholders for whom securities firms acted as nominees.

The Company has never declared or paid a cash dividend and does not anticipate paying any cash dividends on its common stock in the foreseeable future. Management presently intends to retain all available funds for the development of the Company's business and for use as working capital. Future dividend policy will depend upon the Company's earnings, capital requirements, financial condition and other relevant factors. For further information, see "Financing" in Item 7 and Note 6 - Debt, in the Notes to Consolidated Financial Statements.

The Company has not made any sale of unregistered securities during the preceding three years.

The Transfer Agent and Registrar for the Company's common stock is Broadridge Corporate Issuer Solutions, Inc., P.O. Box 1342 Brentwood, NY 11717, (877) 830-4936 or (720) 378-5591.

Item 6. SELECTED FINANCIAL DATA - Not applicable.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Certain statements contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A"), which can be identified by the use of forward-looking terminology such as "may," "will," "expect," "continue," "remains," "intend," "aim," "should," "prospects," "could," "future," "potential," "believes," "plans," "likely," and "probable," or the

negative thereof or other variations thereon or comparable terminology, constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act and are subject to the safe harbors created thereby. These statements should be considered as subject to the many risks and uncertainties that exist in the Company's operations and business environment. Such risks and uncertainties could cause actual results to differ materially from those projected as a result of many factors, including, but not limited to, those under the headings Cautionary Statements Regarding Forward Looking Information and Item 1A. Risk Factors.

The Company is engaged in the manufacture and sale of products in one reportable segment: Piping Systems. The Company's website is www.permapipe.com. Since the Company's revenues are based on large discrete projects, the Company's operating results in any reporting period could be negatively impacted as a result of large variations in the level of overall market demand or delays in the timing of the specific project phases.

The analysis presented below and discussed in more detail throughout the MD&A was organized to provide instructive information for understanding the Company's business. However, this MD&A should be read in conjunction with the Consolidated Financial Statements in Item 8 of this Annual Report on Form 10-K, including the notes thereto and the risk factors contained herein.

Consolidated Results of Operation:

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(\$ in thousands)	2018	2017	(Unfavorable)
Net sales	\$ 128,965	\$ 105,248	22.5%
Gross profit	23,339	11,742	98.8%
Percentage of net sales	18.1%	11.2%	
General and administrative expenses	15,357	16,214	5.3%
Percentage of net sales	11.9%	15.4%	
Selling expense	5,239	5,040	(3.9%)
Percentage of net sales	4.1%	4.8%	
Interest expense, net	1,122	697	(61.0%)
Income/(loss) from operations before income taxes	1,621	(10,209)	N/A

2018 Compared to 2017

Net sales:

Net sales were \$129.0 million in 2018, an increase of 22.5% from \$105.2 million in 2017. Higher revenues were driven by increased oil prices, favorable product mix and better sales and project execution, which resulted in increased sales in the Middle East, U.S. and Canadian markets. We also experienced higher demand for leak detection products.

Cost of sales and gross profit:

Gross profit increased to \$23.3 million in 2018, an increase of 98.8% from 11.7 million in 2017. This increase is attributed to higher volumes, improved pricing and manufacturing efficiencies.

General and administrative expenses:

General and administrative expenses were \$15.4 million in 2018 compared to \$16.2 million in 2017, an improvement of \$0.9 million or 5.3%.

Excluding one-time charges in both periods, annually recurring general and administrative expenses were flat year over year at approximately \$15.0 million. The one-time charges include \$1.2 million in 2017 for internal control review fees incurred in the Middle East region and \$0.4 million in 2018 primarily related to the retirement cost of our prior CFO.

Selling expenses:

Selling expenses increased to \$5.2 million from \$5.0 million. This increase is due to commission expense related to increased sales.

Interest expense:

Interest expense increased to \$1.1 million in 2018 from \$0.7 million in 2017 due to higher borrowings and increased interest rates.

Operating results from operations before income taxes:

Operating results from operations before income taxes improved to income of \$1.6 million in 2018 compared to a loss of \$10.2 million in 2017. The positive contributing factors were due to increased volumes from all geographic served markets, improved pricing and manufacturing efficiencies, and lower selling and general administration costs due to the one-time charge in 2017.

Accounts receivable:

In 2013, the Company started a project in the Middle East as a sub-contractor, with billings in the aggregate amount of approximately \$41.9 million. The Company completed all of its deliverables in 2015, and has since then collected approximately \$37.5 million, with a remaining balance due in the amount of \$4.4 million. Included in this balance is an amount of \$3.7 million, which pertains to retention clauses within the agreements of our customer (contractor), and which become payable by the customer when this project is fully tested and commissioned. In the absence of a firm date for the final commissioning of the project, and due to the long-term nature of this receivable, \$3.5 million of this retention amount was reclassed to a long-term receivable account.

The Company has been engaged in ongoing active efforts to collect the outstanding amount, and has collected \$0.7 million during fiscal year 2018, and another \$0.3 million subsequent to January 31, 2019. The Company has also received an updated acknowledgment of the outstanding balances and assurances of payment from the customer. As a result, the Company did not reserve any allowance against this amount as of January 31, 2019. However, if the Company's efforts to collect on this account are not successful in fiscal 2019, then the Company may be required to recognize an allowance for all, or substantially all, of any such then uncollected amounts in the future.

Income taxes:

The Company's worldwide effective tax rates ("ETR") were 132.7% and 2.3% in 2018 and 2017, respectively. The change in the ETR from the prior year to the current year is largely due to the fact that the Company is in a positive operating income position in certain taxable jurisdictions. Additional factors include the tax benefit of a Canadian business combination which was realized in 2017, and the valuation allowance against the domestic deferred tax asset. Due to this, even relatively small changes to ordinary income will have a large impact to the ETR. The income tax expense in 2018 is \$2.2 million, compared to income tax benefit of \$0.2 million in 2017. The Company accrues taxes in various countries where they are generating income while applying a valuation allowance in the U.S. which attributes to the unusually large ETR. The Company remains in a net operating loss ("NOL") carryforward position.

The U.S. Tax Cuts and Jobs Act ("Tax Act") was enacted on December 22, 2017 and introduced significant changes to U.S. income tax law. Effective in 2018, the Tax Act reduced the U.S. statutory tax rate from 35% to 21%, effective January 1, and created new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the global intangible low-taxed income tax and the base erosion anti-abuse tax, respectively. Since the Company is a fiscal taxpayer, the Company was subject to a blended federal rate of 33.83% as of January 31, 2018. In addition, in 2017 the Company was subject to the one-time transition tax on accumulated foreign subsidiary earnings not previously subject to U.S. income tax. The Company is subject to a current and deferred federal tax rate of 21% as of January 31, 2019.

Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Act, the Company has made reasonable estimates of the effects and recorded provisional amounts in its financial statements as of January 31, 2018, as permitted by SAB 118. The accounting for the tax effects of the Tax Act was completed as of January 31, 2019, and the Company recorded a tax expense of less than \$0.1 million related to the one-time transition tax.

For further information, see Note 8 - Income taxes, in the Notes to Consolidated Financial Statements.

Other

The Company has made a bid to provide insulation of pipes to the East Africa Crude Oil Pipeline ("EACOP") project. The EACOP project is a 1,450 Km (900 mile) long heavy crude oil pipeline from the Lake Albert Basin in Uganda to the Tanga port in Tanzania

being developed by French oil company Total E&P, China National Offshore Oil Corporation and London-based Tullow Oil. The pipeline is 24 inches in diameter, and is electrically heat traced. Once completed, it will be the longest insulated and heat traced pipeline in the world. There can be no assurance that the Company will be successful in its bid for this project, and what the final terms of any such potential engagement will be until the bid is awarded.

Liquidity and capital resources

Cash and cash equivalents as of January 31, 2019 and 2018 were \$ 10.2 million and \$7.1 million, respectively. On January 31, 2019, \$0.1 million was held in the U.S. and \$10.1 million was held in the foreign subsidiaries. The Company's working capital was \$25.9 million on January 31, 2019 compared to \$23.1 million on January 31, 2018. Of the working capital components, cash increased \$4.4 million as a result of utilization of existing inventory in support of increased revenues. Cash provided by operations was \$5.0 million in 2018 compared to cash used in operations of \$1.8 million in 2017. This improvement of \$6.8 million is due to increased sales volume, combined with the use of existing inventory.

Net cash used in investing activities during 2018 and 2017 was \$1.4 million and \$2.4 million, respectively.

Debt totaled \$16.3 million on January 31, 2019. Net cash provided by financing activities in 2018 and 2017 was \$1.1 million and \$3.5 million, respectively. Since the Company generated cash from operations, the Company required less cash provided from financing activities. This was primarily due to increased cash generated from operations. For additional information, see Note 6 - Debt, in the Notes to Consolidated Financial Statements. Other long-term liabilities of \$0.7 million were composed primarily of Uncertain Tax Position liability and deferred rent.

The following table summarizes the Company's estimated contractual obligations on January 31, 2019.

(\$ in thousands)	Year Ending January 31,									
Contractual obligations	Total	2020	2021	2022	2023	2024	Thereafter			
Revolving line North America (1)	\$ 8,890	\$ 8,890	\$ -	\$ -	\$ -	\$ -	\$ -			
Mortgages (2)	11,432	751	737	721	706	692	7,825			
Revolving line foreign (3)	89	89	-	-	-	-	-			
Subtotal	20,411	9,730	737	721	706	692	7,825			
Capitalized lease obligations	585	241	240	83	21	-	-			
Operating lease obligations (4)	19,944	2,516	2,193	2,149	2,110	1,979	8,997			
Employment agreements (5)	2,194	157	-	-	-	-	2,037			
Contractual obligations of discontinued operations (6)	137	137	-	-	-	-	-			
Uncertain tax position obligations (7)	298	-	-	-	-	-	298			
Total	\$43,569	\$12,781	\$3,170	\$2,953	\$2,837	\$2,671	\$19,157			

Notes to contractual obligations table:

- (1) Interest obligations exclude floating rate interest on debt payable under the North American revolving line of credit. Based on the amount of such debt on January 31, 2019, and the weighted average interest rate of 6.43% on that debt, such interest was being incurred at an annual rate of approximately \$0.7 million.
- (2) Scheduled maturities, including interest.
- (3) Scheduled maturities of foreign revolver line, including interest.
- (4) Minimum contractual amounts, assuming no changes in variable expenses.
- (5) Refer to the Exhibit Index for a description of compensation and separation plans.
- (6) Included payments for other liabilities included in discontinued operations.
- (7) Refer to Note 8 Income taxes, in the Notes to Consolidated Financial Statements for a description of the uncertain tax position obligations.

Financing

Revolving line North America. On September 20, 2018, the Company and certain of its U.S. and Canadian subsidiaries (collectively, together with the Company, the "North American Loan Parties") entered into a new Revolving Credit and Security Agreement (the "Credit Agreement") with PNC Bank, National Association, as administrative agent and lender ("PNC"), providing for a new three-year \$18 million Senior Secured Revolving Credit Facility, subject to a borrowing base including various reserves (the "Senior Credit

Facility"). The Senior Credit Facility replaced the Company's then existing \$15 million Credit and Security Agreement, dated September 24, 2014, among various subsidiaries of the Company and Bank of Montreal, as successor by assignment to BMO Harris Bank N.A., as amended (the "Prior Credit Agreement").

The Company initially used borrowings under the new Senior Credit Facility to pay off outstanding amounts under the Prior Credit Agreement (which totaled approximately USD \$3,773,823 plus CAD 4,794,528) and cash collateralize a letter of credit (USD \$154,500). The Company has used proceeds from the new Senior Credit Facility for on-going working capital needs, and expects to continue using this facility to fund future capital expenditures, working capital needs, and other corporate purposes. Borrowings under the Senior Credit Facility bear interest at a rate equal to an alternate base rate or London Interbank Offered Rate ("LIBOR"), plus, in each case, an applicable margin. The applicable margin is based on average quarterly undrawn availability with respect to the Senior Credit Facility. Interest on alternate base rate borrowings are generally payable monthly in arrears and interest on LIBOR borrowings are generally be payable in arrears on the last day of each interest period. Additionally, the Company is required to pay a 0.375% per annum facility fee on the unused portion of the Senior Credit Facility. The facility fee is payable quarterly in arrears.

Subject to certain exceptions, borrowings under the Senior Credit Facility are secured by substantially all of the assets of the Company and certain of its North American subsidiaries. The North American Loan Parties' obligations under the Senior Credit Facility are guaranteed by Perma-Pipe Canada, Inc. The Senior Credit Facility will mature on September 20, 2021. Subject to certain qualifications and exceptions, the Senior Credit Facility contains covenants that, among other things, restrict the North American Loan Parties' ability to create liens, merge or consolidate, consummate acquisitions, make investments, dispose of assets, incur debt, and pay dividends and other distributions. In addition, the North American Loan Parties cannot allow capital expenditures to exceed \$3 million annually (plus a limited carryover of unused amounts).

The Senior Credit Facility also contains financial covenants requiring (i) the North America Loan Parties to achieve consolidated net income (excluding the financial performance of the Company's foreign subsidiaries not party to the Credit Agreement) before interest, taxes, depreciation, amortization and certain other adjustments ("EBITDA") of at least \$1,807,000 for the period from August 1, 2018 through October 31, 2018; (ii) the North America Loan Parties to achieve EBITDA of at least \$2,462,000 for the period from August 1, 2018 through January 31, 2019; (iii) the North America Loan Parties to achieve a ratio of its EBITDA (with certain additional adjustments) to the sum of scheduled cash principal payments on indebtedness for borrowed money and interest payments on the advances under the Senior Credit Facility (excluding from the calculation items related to the financial performance of the Company's foreign subsidiaries not party to the Credit Agreement) to be not less than 1.10 to 1.00 for the nine-month period ending April 30, 2019 and for the quarter ending July 31, 2019 and each quarter end thereafter on a trailing four-quarter basis; and (iv) the Company and its subsidiaries (including the Company's foreign subsidiaries not party to the Credit Agreement) to achieve a ratio of its EBITDA (with certain additional adjustments) to the sum of scheduled cash principal payments on indebtedness for borrowed money and interest payments on the advances under the Senior Credit Facility of not less than 1.10 to 1.00 for the ninemonth period ending October 31, 2018 and for the quarter ending January 31, 2019 and each quarter end thereafter on a trailing four-quarter basis. The Company was in compliance with this requirement as of January 31, 2019.

Revolving lines foreign. The Company also has credit arrangements used by its Middle Eastern subsidiaries. These credit arrangements are in the form of overdraft facilities and project financing at rates competitive in the countries in which the Company operates. The lines are secured by certain equipment, certain assets (such as accounts receivable and inventory), and a guarantee by the Company. Some credit arrangement covenants require a minimum tangible net worth to be maintained, including maintaining certain levels of intercompany subordinated debt. In addition, some of the revolving credit facilities restrict payment of dividends.

On January 31, 2019, the Company was in compliance with the covenants under the credit arrangements. On January 31, 2019, interest rates were based on the EIBOR plus 3.5% per annum, with a minimum interest rate of 4.5% per annum. On January 31, 2019, the Company's interest rates ranged from 6.15% to 6.51%, with a weighted average rate of 6.51%, and the Company could borrow \$9.1 million under these credit arrangements. On January 31, 2019, \$7.9 million of availability was used to support letters of credit to guarantee amounts committed for inventory purchases and for performance guarantees. On January 31, 2019, the Company had borrowed \$0.1 million, and had an additional \$1.1 million available. The foreign revolving lines balances as of January 31, 2019 and 2018, were included as current maturities of long-term debt in the Company's consolidated balance sheets. The Company's credit arrangements used by its Middle Eastern subsidiaries renew on an annual basis.

Critical accounting estimates and policies

The Company's significant accounting policies are discussed in the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K. The application of certain of these policies requires significant judgments or a historical based estimation process that can affect the results of operations and financial position of the Company as well as the related footnote disclosures. The Company bases its estimates on historical experience and other assumptions that it believes are reasonable. If actual amounts ultimately differ from previous estimates, the revisions are included in the Company's results of operations for the period in which the actual amounts become known.

Revenue recognition. During 2018, and in accordance with Accounting Standards Update No. 2014-19, "Revenue from Contracts with Customers" ("ASC 606"), the Company recognizes revenue when a customer obtains control of promised goods or services. See Note 5 - Revenue Recognition for more detail. During 2017, the Company recognized revenues, including shipping and handling charges billed to customers, when all the following criteria were met: (i) persuasive evidence of an arrangement existed, (ii) delivery had occurred or services have been rendered, (iii) the seller's price to the buyer was fixed or determinable, and (iv) collectability was reasonably assured.

• Percentage of completion revenue recognition. All divisions recognize revenues under the above stated revenue recognition policy except for domestic complex contracts that require periodic recognition of income. For these contracts, the Company uses the "percentage of completion" accounting method. Under this approach, income is recognized in each reporting period based on the status of the uncompleted contracts and the current estimates of costs to complete. The choice of accounting method is made at the time the contract is received based on the expected length and complexity of the project. The percentage of completion is determined by the relationship of costs incurred to the total estimated costs of the contract. Provisions are made for estimated losses on uncompleted contracts in the period in which such losses are determined. Changes in job performance, job conditions, and estimated profitability, including those arising from contract penalty provisions and final contract settlements, may result in revisions to costs and income. Such revisions are recognized in the period in which they are determined. Claims for additional compensation due to the Company are recognized in contract revenues when realization is probable and the amount can be reliably estimated.

Inventories. Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out method for all inventories.

Income taxes. Deferred income taxes have been provided for temporary differences arising from differences in the basis of assets and liabilities for tax and financial reporting purposes. Deferred income taxes on temporary differences have been recorded at the current tax rate. The Company assesses its deferred tax assets for realizability at each reporting period.

The Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more likely than not threshold, the amount recognized in the financial statements is a significant benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with the relevant tax authority.

Equity-based compensation. Stock compensation expense for employee equity awards is recognized ratably over the requisite service period of the award. The Black-Scholes option-pricing model is utilized to estimate the fair value of option awards. Determining the fair value of stock options using the Black-Scholes model requires judgment.

Fair value of financial instruments. The carrying values of cash and cash equivalents, accounts receivable and accounts payable are based upon reasonable estimates of their fair value due to their short-term nature. The carrying amount of the Company's short-term debt, revolving line of credit and long-term debt approximate fair value because the majority of the amounts outstanding accrue interest at variable rates.

New accounting pronouncements. See Recent accounting pronouncements in Note 2 - Significant accounting policies, in the Notes to Consolidated Financial Statements.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK - Not applicable.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements of the Company for each of the two years in the periods ended as of January 31, 2019 and 2018 and the notes thereto are set forth as an exhibit hereto.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE - None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures. The Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of January 31, 2019. Based upon the foregoing, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective and operating to provide reasonable assurance that information required to be disclosed by the Company in the reports the Company files or submits under

the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and to provide reasonable assurance that such information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. The Company's management, including its Chief Executive Officer and Chief Financial Officer, have further concluded that the financial statements included in this Annual Report on Form 10-K present fairly, in all material respects, the Company's financial position, results of operations, and cash flows for the periods presented in conformity with accounting principles generally accepted in the United States.

Management's Report on Internal Control Over Financial Reporting. The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. As required by Rule 13a-15(c) under the Exchange Act, the Company's management carried out an evaluation, with the participation of the Chief Executive Officer and Chief Financial Officer, of the effectiveness of its internal control over financial reporting as of the end of the last fiscal year. The framework on which such evaluation was based is contained in the report entitled Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company's system of internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on this evaluation, the Company's management concluded that the Company's internal control over financial reporting was effective as of January 31, 2019.

As previously reported, Management previously identified a material weakness in the Company's internal control over financial reporting that resulted from an accounting error identified by the Company during its preparation and review of the Company's financial statements for the fiscal quarter ended July 31, 2017 related to the Company's accounting for equity-based compensation costs. The Company implemented the following changes to address the material weakness, regarding the adjustment for equity awards that expired unexercised:

- Expanded the training of employees in financial technical accounting, reporting and disclosure-related positions;
- Reinforced the importance of a strong control environment, to emphasize the technical requirements for controls that are designed, implemented and operating effectively and to set the appropriate expectations on internal controls through establishing the related policies and procedures;
- Implemented a catalog of key accounting rules. In the review of any major journal entries for non-standard operational accounting matters, this catalog is being used as a checklist to validate that the required accounting treatment is applied and disclosures are made accordingly. Management has used, and will continue to use, this catalog to evaluate whether the accounting treatment follows the current rules in the catalog, and will then decide whether outside firm expertise is warranted in such a review;
- Has validated and updated the catalog quarterly for any changes resulting from changed or newly pronounced accounting rules, and will continue to do so;
- Reviewed the categories that are underlying the calculations related to stock-based compensation, and has revised procedures for the calculation and review of effects from vested, forfeited and expired options; and
- Implemented a robust and comprehensive equity compensation management and reporting software in the second quarter of 2018.

The Company considered the material weakness in the Company's internal control fully remediated as of October 31, 2018.

Item 9B. OTHER INFORMATION - None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2019 annual meeting of stockholders.

Information with respect to executive officers of the Company is included in Part I, Item 1, hereof under the caption "Executive Officers of the Registrant".

Item 11. EXECUTIVE COMPENSATION

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2019 annual meeting of stockholders.

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

Equity Compensation Plan Information

The following table provides information regarding the number of shares of common stock that may be issued upon exercise of outstanding options, warrants and rights under the Company's equity compensation plans and the weighted average exercise price and number of shares of common stock remaining available for issuance under those plans as of January 31, 2019.

	Number of shares to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of shares remaining available for future grants under equity compensation plans (excluding shares reflected in column (a))
Plan Category	(a)(1)	(b)(1)	(c)(2)
Equity compensation plans approved by stockholders	217,875	\$8.60	337,599

- (1) The amounts shown in columns (a) and (b) of the above table do not include 283,285 outstanding restricted stock granted under the Company's 2013 Omnibus Stock Incentive Plan as amended June 14, 2013 ("2013 Omnibus Plan") or the 2017 Omnibus Stock Incentive Plan as amended June 13, 2017 ("2017 Plan").
- (2) Future grants will only be made out of the 2017 Plan

The other information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2019 annual meeting of stockholders.

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

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2019 annual meeting of stockholders.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2019 annual meeting of stockholders.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- a. List of documents filed as part of this report:
 - (1) Financial Statements Consolidated Financial Statements of the Company Refer to Part II, Item 8 of this report.
 - (2) Financial Statement Schedules
 - Schedule II Valuation and Qualifying Accounts
- b. Exhibits: The exhibits, as listed in the Exhibit Index included herein, are submitted as a separate section of this report.
- c. The response to this portion of Item 15 is submitted under 15a(2) above.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders Perma-Pipe International Holdings, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Perma-Pipe International Holdings, Inc. (a Delaware corporation) and subsidiaries (the "Company") as of January 31, 2019 and 2018, the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the two years in the period ended January 31, 2019, and the related notes and schedule (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of January 31, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended January 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

Basis for opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2004.

Chicago, Illinois April 16, 2019

PERMA-PIPE INTERNATIONAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

		Year ended Ja	nuary 31,
(In thousands, except per share data)		2019	2018
Net sales	\$	128,965 \$	105,248
Cost of sales	Ψ	105,626	93,506
Gross profit		23,339	11,742
Operating expenses:			
General and administrative expense		15,357	16,214
Selling expense		5,239	5,040
Total operating expenses		20,596	21,254
Income/(loss) from operations		2,743	(9,512)
Interest expense, net		1,122	697
Income/(loss) from operations before income taxes		1,621	(10,209)
Income tax expense/(benefit)		2,150	(233)
Net loss	\$	(529) \$	(9,976)
W ' 14 1 1 1 1			
Weighted average common shares outstanding Basic and diluted		7,812	7,680
Loss per share			
Basic and diluted	\$	(0.07) \$	(1.30)

See accompanying Notes to Consolidated Financial Statements. Note: Earnings per share calculations could be impacted by rounding.

PERMA-PIPE INTERNATIONAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Year ended Jan	uary 31,
(In thousands)	2019	2018
Net loss	\$ (529) \$	(9,976)
Other comprehensive (loss)/income		
Currency translation adjustments, net of tax	(1,073)	1,185
Minimum pension liability adjustment, net of tax	(341)	165
Realized/unrealized gain/(loss) on marketable security, net of tax	_	(92)
Other comprehensive (loss)/income	(1,414)	1,258
Comprehensive loss	\$ (1,943) \$	(8,718)

PERMA-PIPE INTERNATIONAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEET

			nuar	y 31,
(In thousands, except per share data)		2019		2018
ASSETS				
Current assets				
Cash and cash equivalents	\$	10,156	\$	7,084
Restricted cash		2,581		1,237
Trade accounts receivable, less allowance for doubtful accounts of \$536 on January 31,				
2019 and \$469 on January 31, 2018		32,508		32,936
Inventories		12,289		16,856
Prepaid expenses and other current assets		3,773		2,703
Costs and estimated earnings in excess of billings on uncompleted contracts		1,653		1,502
Total current assets		62,960		62,318
Property, plant and equipment, net of accumulated depreciation		30,398		34,509
Other assets				
Deferred tax assets		458		391
Goodwill		2,269		2,423
Other assets		6,120		4,943
Total other assets		8,847		7,757
Total assets	\$	102,205	\$	104,584
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Trade accounts payable	\$	12,006	\$	14,186
Commissions and management incentives payable		1,866		787
Accrued compensation and payroll taxes		1,544		1,580
Revolving line North America		8,890		7,273
Current maturities of long-term debt		640		753
Customers' deposits		3,708		5,236
Liabilities of discontinued operations				137
Outside commission liability		1,743		1,800
Other accrued liabilities		3,856		4,122
Billings in excess of costs and estimated earnings on uncompleted contracts		1,569		1,967
Income tax payable		1,266		1,339
Total current liabilities		37,088		39,180
Long-term liabilities		,		,
Long-term debt, less current maturities		6,751		7,728
Deferred compensation liabilities		3,883		4,098
Deferred tax liabilities		1,435		1,242
Other long-term liabilities		688		524
Total long-term liabilities		12,757		13,592
Stockholders' equity		12,707		10,002
Common stock, \$.01 par value, authorized 50,000 shares; 7,854 issued and outstanding January 31, 2019 and 7,717 issued and outstanding January 31, 2018		79		77
Additional paid-in capital		58,793		56,304
Accumulated deficit retained earnings		•		-
Accumulated other comprehensive loss		(3,632)		(3,103)
		(2,880)		(1,466)
Total stockholders' equity	*	52,360	<u></u>	51,812
Total liabilities and stockholders' equity	\$	102,205	\$	104,584

PERMA-PIPE INTERNATIONAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands, except share data)	(Common Stock	P	Additional Paid-In Capital	Treasury Stock	Retained Earnings accumulated Deficit)	C	ccumulated other Comp. Income (Loss)	St	Total ockholders' Equity
Total stockholders' equity on						,		,		1 1
January 31, 2017	\$	76	\$	55,358	\$ (170)	\$ 6,873	\$	(2,724)	\$	59,413
N I						(0.07.6)				(0.07.6)
Net loss						(9,976)				(9,976)
Common stock issued under stock plans, net of shares used for tax										
withholding		1		(215)	170					(44)
Stock-based compensation expense				1,161						1,161
Pension liability adjustment								165		165
Marketable security								(142)		(142)
Foreign currency translation										
adjustment								1,141		1,141
Tax expense on above items								94		94
Total stockholders' equity on January										
31, 2018	\$	77	\$	56,304	\$ -	\$ (3,103)	\$	(1,466)	\$	51,812
Net loss						(529)				(529)
Common stock issued under stock										
plans, net of shares used for tax										
withholding		2		1,324						1,326
Stock-based compensation expense				1,165						1,165
Pension liability adjustment								(341)		(341)
Foreign currency translation										
adjustment								(1,170)		(1,170)
Tax expense on above items								97		97
Total stockholders' equity on January										
31, 2019	\$	79	\$	58,793	\$ -	\$ (3,632)	\$	(2,880)	\$	52,360
Common stock shares							20	18		2017
Balance beginning of year						7.7	16,			7,595,509
Treasury stock released							10,			26,753
Shares issued						1	37,	780		94,280
Balance end of year							54,			7,716,542
Dalance chu di yeal							,J T ,	<i>,</i>		1,110,072

PERMA-PIPE INTERNATIONAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

		Year ended J	anuary 31,
(In thousands)		2019	2018
Operating activities			
Net loss	\$	(529) \$	(9,976)
Adjustments to reconcile net loss to net cash flows provided by/ (used in) operating activities			
Depreciation and amortization		4,575	5,031
Gain on disposal of subsidiary		_	(166)
Deferred tax benefit		215	(958)
Stock-based compensation expense		1,165	1,447
Provision on uncollectible accounts		71	15
Loss on disposal of fixed assets		46	219
Gain on sale of marketable securities		_	(142)
Changes in operating assets and liabilities			
Accounts payable		(3,576)	4,551
Accrued compensation and payroll taxes		1,226	(1,780)
Inventories		4,360	(3,274)
Customers' deposits		(1,517)	2,596
Income taxes receivable and payable		35	(75)
Prepaid expenses and other current assets		(700)	(471)
Accounts receivable		(354)	(1,076)
Costs and estimated earnings in excess of billings on uncompleted contracts		(547)	1,455
Other assets and liabilities		508	762
Net cash provided by/(used in) operating activities		4,978	(1,842)
Investing activities			
Capital expenditures		(1,361)	(2,532)
Proceeds from sale of marketable securities		_	142
Proceeds from sales of property and equipment		_	1
Net cash used in investing activities		(1,361)	(2,389)
Financing activities	-	() /	())
Proceeds from revolving lines		64,736	40,485
Payments of debt on revolving lines		(62,759)	(37,354)
Debt issuance costs		(946)	(<i>c</i>
Payments of other debt		(350)	(211)
Increase in drafts payable		192	34
Proceeds (payments) on capitalized lease obligations		(250)	546
Release of treasury stock		(250) —	170
Stock options exercised and taxes paid related to restricted shares vested		511	(214)
Net cash provided by financing activities		1,134	3,456
Effect of exchange rate changes on cash, cash equivalents and restricted cash	-	(335)	395
Net decrease in cash, cash equivalents and restricted cash		4,416	(380)
Cash, cash equivalents and restricted cash - beginning of period		8,321	, ,
·	Φ.		8,701
Cash, cash equivalents and restricted cash - end of period	\$	12,737 \$	8,321
Supplemental cash flow information			
Interest paid	\$	1,298 \$	804
Income taxes paid		1,731	1,080
Fixed assets acquired under capital leases		_	841

PERMA-PIPE INTERNATIONAL HOLDINGS, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

YEARS ENDED January 31, 2019 and 2018

(Tabular dollars in thousands, except per share data)

Note 1 - Business information

Perma-Pipe International Holdings, Inc. ("PPIH", the "Company", or the "Registrant") was incorporated in Delaware on October 12, 1993. The Company is engaged in the manufacture and sale of products in one distinct segment: Piping.

Fiscal year. The Company's fiscal year ends on January 31. Years and balances described as 2018 and 2017 are the fiscal years ended January 31, 2019 and 2018, respectively.

Nature of business. The Company engineers, designs, manufactures and sells specialty piping systems, and leak detection systems. Specialty piping systems include: (i) insulated and jacketed district heating and cooling ("DHC") piping systems for efficient energy distribution from central energy plants to multiple locations, (ii) primary and secondary containment piping systems for transporting chemicals, hazardous fluids and petroleum products, and (iii) the coating and/or insulation of oil and gas gathering and transmission pipelines. The Company's leak detection systems are sold with its piping systems or on a stand-alone basis, to monitor areas where fluid intrusion may contaminate the environment, endanger personal safety, cause a fire hazard, impair essential services or damage equipment or property.

Geographic information. Net sales attributed to a geographic area are based on the destination of the product shipment. Sales to foreign customers was 61.0% in 2018 compared to 59.5% in 2017. Long-lived assets are based on the physical location of the assets and consist of property, plant and equipment used in the generation of revenues in the geographic area.

(In thousands)	2018	2017
Net sales		
United States	\$ 50,319	\$ 42,648
Canada	34,789	31,206
Middle East	35,117	26,322
India	3,755	1,317
Other	4,985	3,755
Total net sales	\$ 128,965	\$ 105,248
Property, plant and equipment, net of accumulated depreciation		
United States	\$ 10,279	\$ 11,307
Canada	11,862	13,868
Middle East	8,103	9,119
India	154	215
Total	\$ 30,398	\$ 34,509

Note 2 - Significant accounting policies

Use of estimates. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue recognition. During 2018, and in accordance with Accounting Standards Update No. 2014-19, "Revenue from Contracts with Customers" ("ASC 606"), the Company recognizes revenue when a customer obtains control of promised goods or services. See Note 5 - Revenue Recognition for more detail. During 2017, the Company recognized revenues, including shipping and handling charges billed to customers, when all the following criteria were met: (i) persuasive evidence of an arrangement existed, (ii) delivery had occurred or services have been rendered, (iii) the seller's price to the buyer was fixed or determinable, and (iv) collectability was reasonably assured.

• Percentage of completion revenue recognition. All divisions recognize revenues under the above stated revenue recognition policy except for domestic complex contracts that require periodic recognition of income. For these contracts, the Company uses the

"percentage of completion" accounting method. Under this approach, income is recognized in each reporting period based on the status of the uncompleted contracts and the current estimates of costs to complete. The choice of accounting method is made at the time the contract is received based on the expected length and complexity of the project. The percentage of completion is determined by the relationship of costs incurred to the total estimated costs of the contract. Provisions are made for estimated losses on uncompleted contracts in the period in which such losses are determined. Changes in job performance, job conditions, and estimated profitability, including those arising from contract penalty provisions and final contract settlements, may result in revisions to costs and income. Such revisions are recognized in the period in which they are determined. Claims for additional compensation due to the Company are recognized in contract revenues when realization is probable and the amount can be reliably estimated.

Shipping and handling. Shipping and handling costs are included in cost of sales, and the amounts invoiced to customers relating to shipping and handling are included in net sales.

Sales tax. Sales tax is reported on a net basis in the consolidated financial statements.

Operating cycle. The length of contracts vary, but are typically less than one year. The Company includes in current assets and liabilities amounts realizable and payable in the normal course of contract completion unless completion of such contracts extends significantly beyond one year.

Consolidation. The consolidated financial statements include the accounts of the Company and its domestic and foreign subsidiaries, all of which are wholly owned. All intercompany balances and transactions have been eliminated.

Translation of foreign currency. Assets and liabilities of consolidated foreign subsidiaries are translated into U.S. dollars at exchange rates in effect at year-end. Revenues and expenses are translated at average weighted exchange rates prevailing during the year. Gains or losses on foreign currency transactions and the related tax effects are reflected in net income. The resulting translation adjustments are included in stockholders' equity as part of accumulated other comprehensive income (loss). The aggregated foreign exchange transaction loss recognized in the income statement was \$0.1 million and \$0.7 million for the years 2018 and 2017, respectively.

Contingencies. The Company is subject to various legal proceedings and claims that arise in the ordinary course of business, including those involving environmental, tax, product liability and general liability claims. The Company accrues for such liabilities when it is probable that future costs will be incurred and such costs can be reasonably estimated. Such accruals are based on developments to date, the Company's estimates of the outcomes of these matters, and its experience in contesting, litigating and settling other similar matters. The Company does not currently anticipate the amount of any ultimate liability with respect to these matters will materially affect the Company's financial position, liquidity or future operations.

Cash and cash equivalents. All highly liquid investments with a maturity of three months or less when purchased are considered to be cash equivalents. Cash and cash equivalents were \$10.2 million and \$7.1 million as of January 31, 2019 and 2018, respectively. On January 31, 2019, \$0.1 million was held in the U.S. and \$10.1 million was held in the foreign subsidiaries. On January 31, 2018, \$0.7 million was held in the U.S. and \$6.4 million was held in the foreign subsidiaries.

Accounts payable included drafts payable of \$0.2 million and less than \$0.1 million on January 31, 2019 and 2018, respectively.

Restricted cash. Restricted cash held in the U.S. on January 31, 2019 was \$1.5 million, all of which is a cash collateral held by PNC Bank in relation to the new credit agreement. There was no restricted cash held in the U.S. on January 31, 2018. Restricted cash, held by foreign subsidiaries, was \$1.1 million and \$1.2 million as of January 31, 2019 and 2018, respectively. Restricted cash held by foreign subsidiaries related to fixed deposits that also serve as security deposits and guarantees.

(In thousands)	2018	2017
Cash and cash equivalents	\$ 10,156	\$7,084
Restricted cash	2,581	1,237
Cash, cash equivalents and restricted cash shown in the statement of cash flows	\$ 12,737	\$8,321

Accounts receivable. The majority of the Company's accounts receivable are due from geographically dispersed contractors and manufacturing companies. Credit is extended based on an evaluation of a customer's financial condition, including the availability of credit insurance. In the U.S., collateral is not generally required. In the U.A.E. and Saudi Arabia, letters of credit are usually obtained for significant orders. Accounts receivable are due within various time periods specified in the terms applicable to the specific customer and are stated at amounts due from customers net of an allowance for claims and doubtful accounts. Standard payment terms are net 30 days. The allowance for doubtful accounts is based on specifically identified amounts in customers' accounts, where future collectability is deemed uncertain. Management may exercise its judgment in adjusting the provision as a

consequence of known items, such as current economic factors and credit trends. Past due trade accounts receivable balances are written off when the Company's collection efforts have been unsuccessful in collecting the amount due and the amount is deemed uncollectible. The write off is recorded against the allowance for doubtful accounts.

One of the Company's accounts receivable in the total amount of \$5.4 million as of January 31, 2018 (inclusive of a retention receivable amount of \$3.7 million, of which \$3.5 million and 3.2 million were included in the balance of other long-term assets as of January 31, 2019 and January 31, 2018, due to the long-term nature of the receivables) has been outstanding for several years. The Company completed all of its deliverables in 2015, and has been engaged in ongoing active efforts to collect this outstanding amount. During fiscal year 2018, the Company received payments of approximately \$0.7 million, which reduced the balance of this receivable to \$4.7 million as of January 31, 2019. Subsequent to January 31, 2019, the Company received a further \$0.3 million, thus reducing this balance to \$4.4 million. As a result, the Company did not reserve any allowance against this receivable as of January 31, 2019. The Company continues to engage with the customer to ensure full payment of open balances, and has also received an updated acknowledgment of the outstanding balances and assurances of payment from the customer. However, if the Company's efforts to collect on this account are not successful in fiscal 2019, then the Company may recognize an allowance for all, or substantially all, of any such then uncollected amounts.

On January 31, 2019 and January 31, 2018, no one customer accounted for more than 10% of the Company's net sales.

Three customers accounted for 39.4% and 34.9% of accounts receivable on January 31, 2019 and 2018, respectively.

Concentration of credit risk. The Company maintains its U.S. cash in bank deposit accounts at financial institutions that are insured by the Federal Deposit Insurance Corporation ("FDIC"). Cash balances are below FDIC limits. The Company has not experienced any losses in such accounts.

The Company has a broad customer base doing business in all regions of the U.S. as well as other areas in the world.

Accumulated other comprehensive loss. Accumulated other comprehensive loss represents the change in equity from non-owner transactions and consisted of foreign currency translation, minimum pension liability and marketable securities.

(In thousands)	2018	2017
Equity adjustment foreign currency, gross	\$ (1,438) \$	(268)
Minimum pension liability, gross	(1,648)	(1,307)
Marketable security, gross	_	_
Subtotal excluding tax effect	(3,086)	(1,575)
Tax effect of foreign exchange currency	91	(6)
Tax effect of minimum pension liability	115	115
Tax effect of marketable security	_	_
Total accumulated other comprehensive loss	\$ (2,880) \$	(1,466)

Inventories. Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out method for all inventories.

(In thousands)	2018	2017
Raw materials	\$ 11,962	\$ 17,166
Work in process	488	291
Finished goods	731	1,024
Subtotal	13,181	18,481
Less allowance	892	1,625
Inventories	\$ 12,289	\$ 16,856

Long-lived assets. Property, plant and equipment are stated at cost. Interest is capitalized in connection with the construction of facilities and amortized over the asset's estimated useful life. Long-lived assets are reviewed for possible impairment whenever events indicate that the carrying amount of such assets may not be recoverable. If such a review indicates impairment, the carrying amount of such assets is reduced to an estimated fair value.

Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which range from three to 30 years. Leasehold improvements are depreciated over the remaining life of the lease or its useful life, whichever is shorter. Amortization of assets under capital leases is included in depreciation. Depreciation expense was approximately \$4.5 million in 2018 and \$4.9 million in 2017.

(In thousands)	2018	2017
Land, buildings and improvements	\$ 22,327	\$ 22,796
Machinery and equipment	47,168	47,009
Furniture, office equipment and computer systems	4,335	4,504
Transportation equipment	3,311	3,490
Subtotal	77,141	77,799
Less accumulated depreciation	46,743	43,290
Property, plant and equipment, net of accumulated depreciation	\$ 30,398	\$ 34,509

Impairment of long-lived assets. The Company evaluates long-lived assets (including intangible assets) for impairment whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. A factor considered important that could trigger an impairment review includes a year-to-date loss from operations. The Company reported income from operations in 2018, compared to losses from operations in 2017. An asset is considered impaired if its carrying amount exceeds the undiscounted future net cash flow the asset is expected to generate. Based on the Company's review of the projected cash flows over the remaining useful lives of the assets, management had determined that there was no impairment of long-lived assets as of January 31, 2018. Since there was no triggering event in 2018, management has determined that there was no impairment of long-lived assets as of January 31, 2019.

Goodwill. The purchase price of an acquired company is allocated between intangible assets and the net tangible assets of the acquired business with the residual of the purchase price recorded as goodwill. All identifiable goodwill as of January 31, 2019 and 2018, is attributable to the purchase of Perma-Pipe Canada, Ltd. ("PPC").

		Foreign exchange			
(In thousands)	January 31, 2018	change effect	January 31, 2019		
Goodwill	\$ 2,423	\$ (154)) \$ 2,269		

The Company performs an impairment assessment of goodwill annually as of January 31, or more frequently if triggering events occur, based on the estimated fair value of the related reporting unit. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. There was no impairment to goodwill during 2018 or 2017.

Other intangible assets with definite lives. The Company owns several patents including those covering features of its piping and electronic leak detection systems. Patents are capitalized and amortized on a straight-line basis over a period not to exceed the legal lives of the patents. The Company expenses costs incurred to renew or extend the term of intangible assets. Gross patents were \$2.6 million as of January 31, 2019 and 2018. Accumulated amortization was approximately \$2.5 million and \$2.4 million as of January 31, 2019 and 2018. Future amortization over the next five years ending January 31 will be less than \$0.1 million in the years 2019 to 2023 and less than \$0.1 million thereafter. Amortization expense is expected to be recognized over the weighted-average period of 7.3 years.

Research and development. Research and development expenses consist of materials, salaries and related expenses of engineering personnel and outside services for product development projects. Research and development costs are expensed as incurred. Research and development expense was approximately \$0.2 million and \$0.3 million in 2018 and 2017, respectively.

Income taxes. Deferred income taxes have been provided for temporary differences arising from differences in the basis of assets and liabilities for tax and financial reporting purposes. Deferred income taxes on temporary differences have been recorded at the current tax rate. The Company assesses its deferred tax assets and liabilities for realizability at each reporting period.

The Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more likely than not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with the relevant tax authority. For further information, see Note 8 - Income taxes in the Notes to Consolidated Financial Statements.

Net loss per common share. Earnings per share ("EPS") is computed by dividing net loss by the weighted average number of common shares outstanding (basic). The Company reported net losses in 2018 and 2017; therefore, the diluted loss per share was identical to the basic loss per share rather than assuming conversion, exercise, or contingent issuance of securities that would have an anti-dilutive effect on earnings per share. The dilutive shares are in the following table:

Basic weighted average number of common shares outstanding (in thousands)	2018	2017
Basic weighted average number of common shares outstanding	7,812	7,680
Dilutive effect of stock options and restricted stock units		_
Weighted average number of common shares outstanding assuming full dilution	7,812	7,680
Stock options not included in the computation of diluted EPS of common stock because the		
option exercise prices exceeded the average market prices	82	139
Canceled options during the year	(63)	(131)
Stock options with an exercise price below the average stock price	136	219

Equity-based compensation. The Company issues various types of stock-based awards to employees and directors: restricted stock, deferred stock and stock options. Non-cash compensation expense associated with restricted stock is based on the fair value of the common stock at the date of grant, and amortized using the straight line method over the vesting period. Compensation expense associated with deferred stock which is awarded to the Board of Directors (non-employee) is based upon the fair value of the common stock at the date of grant, and since the grant vests immediately it is expensed on the date of the grant. Stock compensation expense for stock options is recognized ratably over the requisite service period of the award. The Black-Scholes option-pricing model is utilized to estimate the fair value of option awards.

Segments. Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker ("CODM") in making decisions regarding resource allocation and assessing performance The Company's Chief Executive Officer is the CODM, and he uses a combination of several management reports, including the Company's financial information in determining how to allocate resources and assess performance. The Company has determined that it operates in one segment.

Fair value of financial instruments. The carrying values of cash and cash equivalents, accounts receivable and accounts payable are reasonable estimates of their fair value due to their short-term nature. The carrying amount of the Company's short-term debt, revolving line of credit and long-term debt approximate fair value because the majority of the amounts outstanding accrue interest at variable market rates.

Recent accounting pronouncements. In March 2017, the Financial Accounting Standards Board ("FASB") issued authoritative guidance that changes the income statement presentation of the components of net periodic benefit cost related to defined benefit pension and other postretirement plans. The primary change under the new guidance is that only the service cost component of net periodic benefit cost should be included in operating income and is eligible for capitalization as an asset. The other components of net periodic benefit cost, such as interest cost, the expected return on assets, amortization of actuarial gains and losses and prior service cost, should be presented below operating income. The guidance is effective for the Company starting February 1, 2018 and was applied retrospectively to the presentation of net periodic benefit cost, and recorded in miscellaneous income and expense in 2017 and 2018. Since the plans have not incurred any service costs, there has been no need to capitalize any costs. The adoption of this guidance did not have a material impact on the Company's results of operations or financial position.

In October 2016, the FASB issued authoritative guidance requiring the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs rather than when transferred to a third party as required under the current guidance. The new guidance is effective for the Company beginning February 1, 2018, with early adoption permitted. The adoption of this guidance did not have a material impact on the Company's results of operations or financial position.

In February 2016, the FASB issued ASU 2016-02, *Leases* (Topic 842). This ASU requires entities to recognize assets and liabilities for most leases on their balance sheets. It also requires additional qualitative and quantitative disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. ASU No. 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, with early adoption permitted. The Company will adopt the ASU effective February 1, 2019 using the alternative transition approach - a cumulative effect adjustment to retained earnings at that date, which is expected to be zero. The Company will avail itself of the practical expedients provided under the ASU and its subsequent amendments regarding identification of leases, lease classification, indirect costs, and the combination of lease and non-lease components. The Company expects to record a right-of-use asset and lease liability of approximately \$10.0 million to \$11.0 million at adoption.

In May 2014, FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers ("Topic 606")", with several clarifying updates issued during 2016. This ASU was effective for the Company beginning February 1, 2018. The adoption of this ASU did not have a material impact on the Company's results of operations or financial position. Refer to Note 5 - Revenue recognition - for more detail.

The Company evaluated other recent accounting pronouncements and does not expect them to have a material impact on the consolidated financial statements.

Note 3 - Discontinued operations

The Company had a Filtration Products segment, which was sold in fiscal 2016, and was reported as discontinued operations in the consolidated financial statements for those corresponding years. Included in accrued expenses reported for January 31, 2018 is an amount of \$0.1 million for warranty liability. Net cash used in discontinued operating activities during 2017 was less than \$0.1 million. There were no expenses related to discontinued operations in fiscal 2018.

Note 4 - Retention

A retention receivable is a portion of an outstanding receivable balance amount withheld by a customer until a contract is fully completed as specified in the contractual agreement. Retention receivables of \$1.7 million and \$2.4 million were included in the balance of trade accounts receivable as of January 31, 2019 and 2018, respectively. A retention receivable of \$4.3 million and \$3.2 million was included in the balance of other long-term assets as of January 31, 2019 and 2018 due to the long-term nature of the receivables. See Note 2 - Accounts receivable for further information regarding the future realization of these long-term balances.

Note 5 - Revenue recognition

On February 1, 2018, the Company adopted Accounting Standards Codification Topic 606, "Revenue from Contracts with Customers," ("Topic 606"), using the modified retrospective method applied to contracts that were not completed as of that date. Under this methodology the effect, if any, of initially applying the new revenue standard was to be recorded as an adjustment to the opening balance of retained earnings, while periods prior to the adoption date were not to be adjusted and continue to be reported in accordance with the accounting policies in effect for those periods.

The Company conducted a complete and thorough analysis of each single element of the five-step model of Topic 606 and concluded that there was no material impact to the Company as a result of the adoption of the new standard. As such, the Company was not required to make a cumulative adjustment to the opening balances of retained earnings, contract assets or contract liabilities upon its initial application of the new revenue standard.

Revenue from contracts with customers:

The Company defines a contract as an agreement that has approval and commitment from both parties, defined rights and identifiable payment terms, which ensures the contract has commercial substance and that collectability is reasonably assured.

The Company's standard revenue transactions are classified in to two main categories:

- 1) Systems which include all bundled products in which Perma-Pipe designs, engineers, and manufactures pre-insulated specialty piping systems, insulates subsea flowline pipe, subsea oil production equipment, and land-lines. Additionally, this systems classification also includes coating applied to pipes and structures.
- 2) Products which include cables, leak detection products, heat trace products sold under the PermAlert brand name, material/goods not bundled with piping or flowline systems, and field services not bundled into a project contract.

In accordance with ASC 606-10-25-27 through 29, the Company recognizes specialty piping and coating systems revenue over time as the manufacturing process progresses because one of the following conditions exist:

- 1) the customer owns the material that is being insulated or coated, so the customer controls the asset and thus the work-in-process; or
- 2) the customer controls the work-in-process due to the custom nature of the pre-insulated, fabricated system being manufactured as evidenced by the Company's right to payment for work performed to date plus seller's profit margin for products that have no alternative use for the Company.

Products revenue is recognized when goods are shipped or services are performed (ASC 606-10-25-30).

A breakdown of the Company's revenues by revenue class for fiscal years 2018 and 2017 are as follows:

		2018		2017
	Sales	% to Total	Sales	% to Total
Products	13,576	11%	8,495	8%
Specialty Piping Systems and Coating				
Revenue recognized under input method	40,525	31%	39,891	38%
Revenue recognized under output method	74,864	58%	56,862	54%
Total	128,965	100%	105,248	100%

The input method as noted in ASC 606-10-55-20 is used by the U.S. operating entities to measure revenue by the costs incurred to date relative to the estimated costs to satisfy the contract using the percentage-of-completion method. Generally, these contracts are considered a single performance obligation satisfied over time and due to the custom nature of the goods and services, the percentage-of-completion method is the most faithful depiction of the Company's performance as it measures the value of the goods and services transferred to the customer. Costs include all material, labor, and direct costs incurred to satisfy the performance obligations of the contract. Revenue recognition begins when projects costs are incurred.

The output method as noted in ASC 606-10-55-17 is used by all other operating entities to measure revenue by the direct measurement of the outputs produced relative to the remaining goods promised under the contract. Due to the types of end customers, generally these contracts require formal inspection protocols or specific export documentation for units produced, or produced and shipped, therefore, the output method is the most faithful depiction of the Company's performance. Depending on the conditions of the contract, revenue may be recognized based on units produced, inspected and held by the Company prior to shipment or on units produced, inspected and shipped.

Some of the Company's operating entities invoice and collect milestones or other contractual obligations prior to the transfer of goods and services, but does not recognize revenue until the performance obligations are satisfied under the methods discussed above.

Contract modifications that occur prior to the start of the manufacturing process will supersede the original contract and revenue is recognized using the modified contract value. Contract modifications that occur during the manufacturing process (changes in scope of work, job performance, material costs, and/or final contract settlements) are recognized in the period in which the revisions are known. Provisions for losses on uncompleted contracts are made in contract liabilities account in the period such losses are identified.

Contract assets and liabilities:

Contract assets represent revenue recognized in excess of amounts billed (unbilled receivables) for contract work in progress for which the Company has a valid contract and an enforceable right to payment for work completed. Contract liabilities represent billings in excess of costs (unearned revenue) for contract work in progress for which the Company has a valid contract and an enforceable right to payment for work completed. Both customer billings and the satisfaction (or partial satisfaction) of the performance obligation(s) occur throughout the manufacturing process and impacts the period end balances in these accounts.

The Company anticipates that substantially all costs incurred for uncompleted contracts as of January 31, 2019 will be billed and collected within one year.

The following tables set forth the changes in the Company's contract assets and liabilities for the periods indicated. The Company expects to recognize the remaining balances as of January 31, 2019 within one year.

	Contract Assets
Balance January 31, 2018	\$1,502
Costs and gross profit recognized during the period for uncompleted contracts from the prior period	(6,458)
Costs and deferred gross profit incurred on uncompleted contracts not billed at the end of the current period	6,609
Closing Balance at January 31, 2019	1,653

	Contract Liabilities
Balance January 31, 2018	\$1,967
Revenue recognized during the period for uncompleted contracts from the prior period	(3,222)
New contracts entered into that are uncompleted at the end of the current period	2,824
Closing Balance at January 31, 2019	1,569

The following table shows the reconciliation of the cost in excess of billings:

(In thousands)	2018	2017
Costs incurred on uncompleted contracts	\$ 12,348	\$ 11,955
Estimated earnings	7,430	6,336
Earned revenue	19,778	18,291
Less billings to date	19,694	18,756
Costs in excess of billings, net	\$ 84	\$ (465)
Balance sheet classification		
Contract assets: Costs and estimated earnings in excess of billings on uncompleted		
contracts	\$ 1,653	\$ 1,502
Contract liabilities: Billings in excess of costs and estimated earnings on		
uncompleted contracts	(1,569)	(1,967)
Costs in excess of billings, net	\$ 84	\$ (465)

Practical expedients:

Costs to obtain a contract are not considered project costs as they are not usually incremental, nor does job duration span more than one year. The Company applies practical expedient for these types of costs and as such are expensed in the period incurred.

As the Company's contracts are less than one year, the Company has applied the practical expedient regarding disclosure of the aggregate amount and future timing of performance obligations that are unsatisfied or partially satisfied as of the end of the reporting period.

Note 6 - Debt

(In thousands)		2018	2017
Revolving line North America	\$	8,890 \$	7,273
Mortgage notes		6,961	7,723
Revolving lines foreign		84	123
Capitalized lease obligations		536	846
Total debt	<u> </u>	16,471	15,965
Unamortized debt issuance costs		(181)	(200)
Less current maturities		9,539	8,037
Total long-term debt	\$	6,751 \$	7,728
Current portion of long-term debt	\$	9,539 \$	8,037
Unamortized debt issuance costs		(9)	(11)
Total short-term debt	\$	9,530 \$	8,026

The following table summarizes the Company's scheduled maturities on January 31:

(In thousands)	Total	2020	2021	2022	2023	2024	Th	ereafter
Revolving line North America	\$ 8,890	\$ 8,890	\$ 	\$ 	\$ 	\$ 	\$	
Mortgages	6,961	355	361	366	372	378		5,129
Revolving line foreign	84	84	_	_	_	_		_
Capitalized lease obligations	536	210	225	81	20			_
Total	\$ 16,471	\$ 9,539	\$ 586	\$ 447	\$ 392	\$ 378	\$	5,129

Revolving line North America. On September 20, 2018, the Company and certain of its U.S. and Canadian subsidiaries (collectively, together with the Company, the "North American Loan Parties") entered into a new Revolving Credit and Security Agreement (the "Credit Agreement") with PNC Bank, National Association, as administrative agent and lender ("PNC"), providing for a new three-year \$18 million Senior Secured Revolving Credit Facility, subject to a borrowing base including various reserves (the "Senior Credit Facility"). The Senior Credit Facility replaced the Company's then existing \$15 million Credit and Security Agreement, dated September 24, 2014, among various subsidiaries of the Company and Bank of Montreal, as successor by assignment to BMO Harris Bank N.A., as amended (the "Prior Credit Agreement").

The Company initially used borrowings under the new Senior Credit Facility to pay off outstanding amounts under the Prior Credit Agreement (which totaled approximately USD \$3,773,823 plus CAD 4,794,528) and cash collateralize a letter of credit (USD \$154,500). The Company has used proceeds from the new Senior Credit Facility for on-going working capital needs, and expects to continue using this facility to fund future capital expenditures, working capital needs and other corporate purposes. Borrowings under the Senior Credit Facility bear interest at a rate equal to an alternate base rate or LIBOR, plus, in each case, an applicable margin. The applicable margin is based on average quarterly undrawn availability with respect to the Senior Credit Facility. Interest on alternate base rate borrowings are generally payable monthly in arrears and interest on LIBOR borrowings are generally be payable in arrears on the last day of each interest period. Additionally, the Company is required to pay a 0.375% per annum facility fee on the unused portion of the Senior Credit Facility. The facility fee is payable quarterly in arrears.

Subject to certain exceptions, borrowings under the Senior Credit Facility are secured by substantially all of the assets of the Company and certain of its North American subsidiaries. The North American Loan Parties' obligations under the Senior Credit Facility are guaranteed by Perma-Pipe Canada, Inc. The Senior Credit Facility will mature on September 20, 2021. Subject to certain qualifications and exceptions, the Senior Credit Facility contains covenants that, among other things, restrict the North American Loan Parties' ability to create liens, merge or consolidate, consummate acquisitions, make investments, dispose of assets, incur debt, and pay dividends and other distributions. In addition, the North American Loan Parties cannot allow capital expenditures to exceed \$3 million annually (plus a limited carryover of unused amounts).

The Senior Credit Facility also contains financial covenants requiring (i) the North America Loan Parties to achieve consolidated net income (excluding the financial performance of the Company's foreign subsidiaries not party to the Credit Agreement) before interest, taxes, depreciation, amortization and certain other adjustments ("EBITDA") of at least \$1,807,000 for the period from August 1, 2018 through October 31, 2018; (ii) the North America Loan Parties to achieve EBITDA of at least \$2,462,000 for the period from August 1, 2018 through January 31, 2019; (iii) the North America Loan Parties to achieve a ratio of its EBITDA (with certain additional adjustments) to the sum of scheduled cash principal payments on indebtedness for borrowed money and interest payments on the advances under the Senior Credit Facility (excluding from the calculation items related to the financial performance of the Company's foreign subsidiaries not party to the Credit Agreement) to be not less than 1.10 to 1.00 for the nine-month period ending April 30, 2019 and for the quarter ending July 31, 2019 and each quarter end thereafter on a trailing four-quarter basis; and (iv) the Company and its subsidiaries (including the Company's foreign subsidiaries not party to the Credit Agreement) to achieve a ratio of its EBITDA (with certain additional adjustments) to the sum of scheduled cash principal payments on indebtedness for borrowed money and interest payments on the advances under the Senior Credit Facility of not less than 1.10 to 1.00 for the ninemonth period ending October 31, 2018 and for the quarter ending January 31, 2019 and each quarter end thereafter on a trailing four-quarter basis. The Company was in compliance with this requirement as of January 31, 2019.

As of January 31, 2019, the Company had borrowed an aggregate of \$8.9 million at 8.0% and 6.0%, with a weighted average rate of 6.43%, and had \$3.1 million available under the Senior Credit Facility.

Revolving lines foreign. The Company also has credit arrangements used by its Middle Eastern subsidiaries. These credit arrangements are in the form of overdraft facilities and project financing at rates competitive in the countries in which the Company operates. The lines are secured by certain equipment, certain assets (such as accounts receivable and inventory), and a guarantee by the Company. Some credit arrangement covenants require a minimum tangible net worth to be maintained, including maintaining certain levels of intercompany subordinated debt. In addition, some of the revolving credit facilities restrict payment of dividends. On January 31, 2019, the Company was in compliance with the covenants under the credit arrangements. On January 31, 2019, interest rates were based on the EIBOR plus 3.5% per annum, with a minimum interest rate of 4.5% per annum. On January 31,

2019, the Company's interest rates ranged from 6.15% to 6.51%, with a weighted average rate of 6.51%, and the Company could borrow \$9.1 million under these credit arrangements. On January 31, 2019, \$7.9 million of availability was used to support letters of credit to guarantee amounts committed for inventory purchases and for performance guarantees. On January 31, 2019, the Company had borrowed \$0.1 million, and had an additional \$1.1 million available. The foreign revolving lines balances as of January 31, 2019 and 2018, were included as current maturities of long-term debt in the Company's consolidated balance sheets.

The Company had a revolving line for 8.0 million Dirhams (approximately \$2.2 million U.S. dollars at January 31, 2019) from a bank in the U.A.E. The loan had an interest rate of approximately 6.15% and expired on March 31, 2019. The Company is in current negotiations to renew and expand this facility.

The Company has a revolving line for 25.0 million Dirhams (approximately \$6.8 million U.S. dollars at January 31, 2019) from a bank in the U.A.E. The loan has an interest rate of approximately 6.51% and matures July 2019.

The Company' credit arrangements used by its Middle Eastern subsidiaries renew on an annual basis.

The Company guarantees the subsidiaries' debt including all foreign debt.

Mortgages. On July 28, 2016, the Company borrowed \$8.0 million CAD (approximately \$6.1 million at the prevailing exchange rate on the transaction date) from a bank in Canada under a mortgage note secured by the manufacturing facility located in Alberta, Canada that matures on December 23, 2042. The interest rate is variable, currently at 6.05%, with monthly payments of \$38 thousand CAD (approximately \$29 thousand) for interest; and monthly payments of \$27 thousand CAD (approximately \$21 thousand) for principal. Principal payments began January 2018.

On June 19, 2012, the Company borrowed \$1.8 million under a mortgage note secured by its manufacturing facility in Lebanon, Tennessee. The proceeds were used for payment of amounts borrowed. The loan bears interest at 4.5% with monthly payments of \$13 thousand for both principal and interest and matures July 1, 2027. On June 19, 2022, and on the same day of each year thereafter, the interest rate shall adjust to the prime rate, provided that the applicable interest rate shall not adjust more than 2.0% per annum and shall be subject to a ceiling of 18.0% and a floor of 4.5%.

Capital leases. On October 20, 2017, the Company obtained a capital lease for \$0.18 million CAD (approximately \$0.1 million at the prevailing exchange rate on the transaction date) to finance vehicle equipment. The interest rate for these capital leases is 4.0% per annum with monthly principal and interest payments of \$3 thousand, and these leases mature on September 29, 2022.

On May 5, 2017, the Company obtained two capital leases for a total of \$0.94 million CAD (approximately \$0.7 million USD at the prevailing exchange rate on the transaction date) to finance vehicle equipment. The interest rate for these capital leases is 7.8% per annum with monthly principal and interest payments of \$9 thousand, and these leases mature on April 30, 2021.

On August 5, 2016, the Company obtained a capital lease for 0.6 million Indian Rupees (approximately \$8 thousand U.S. dollars at the prevailing exchange rate on the transaction date) to finance vehicle equipment. The interest rate for this capital lease is 15.6% per annum with monthly principal and interest payments of less than a thousand dollars, and the lease matures on July 5, 2019.

Note 7 - Lease information

Property under capitalized leases (in thousands)	2018	2017
Machinery and equipment	\$ 855 \$	1,729
Transportation equipment	 8	9
Subtotal	863	1,738
Less accumulated amortization	355	699
Total	\$ 508 \$	1,039

The Company has several significant operating lease agreements as follows:

- Office Space of approximately 31,650 square feet in Niles, IL is leased until October, 2023.
- Five acres of land in Louisiana is leased through March, 2022.
- Thirty acres of land in Canada. Ten acres leased through October, 2019, and twenty acres leased through December, 2022
- Nine acres of land in the Kingdom of Saudi Arabia is leased through April, 2030.
- Production facilities in the U.A.E. of approximately 80,200 square feet on approximately 107,600 square feet of land is leased until June, 2030.

- Office space of approximately 21,500 square feet and open land for production facilities of approximately 423,000 square feet in the U.A.E. is leased until July, 2032.
- Production facilities in the U.A.E. of approximately 78,100 square feet is leased until December, 2032.

The Company had leased one of its administrative offices in the U.A.E. from a partnership in which a former employee of the Company was a partner. The Company ended this lease arrangement in 2017 and paid total rent of \$0.2 million to the partnership in 2017. No payments were made in 2018. Lease payments were based on prevailing market rates.

On January 31, 2019, future minimum annual rental commitments under non-cancelable lease obligations were as follows:

(In thousands)	Operating L	eases	Capital Leases
2019	\$ 2,	516	\$ 241
2020	2,	193	240
2021	2,	149	82
2022	2,	110	21
2023	1,	979	_
Thereafter	8,	997	
Subtotal	19,	944	584
Less Amount representing interest		_	(48)
Future minimum lease payments	\$ 19.	944	\$ 536

Rental expense for operating leases was \$2.6 million and \$2.9 million in 2018 and 2017, respectively.

Note 8 - Income taxes

Income/(loss) from continuing operations before income taxes (in thousands)	2018	2017
Domestic	\$ (2,331)	\$ (7,924)
Foreign	3,952	(2,285)
Total	\$ 1,621	\$ (10,209)
Components of income tax expense/(benefit) (in thousands)	 2018	2017
Current		
Federal	\$ 48	\$ _
Foreign	1,695	697
State and other	196	28
Total current income tax expense (benefit)	 1,939	725
Deferred		
Federal	_	(33)
Foreign	211	(925)
State and other	_	
Total deferred income tax benefit	211	(958)
Total income tax expense/(benefit)	\$ 2,150	\$ (233)

The U.S. Tax Cuts and Jobs Act ("Tax Act") was enacted on December 22, 2017 and introduced significant changes to U.S. income tax law. Effective in 2018, the Tax Act reduces the U.S. statutory tax rate from 35% to 21%, effective January 1, and creates new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the global intangible low-taxed income tax and the base erosion anti-abuse tax, respectively. Since the Company is a fiscal taxpayer, the Company was subject to a blended federal rate of 33.83% as of January 31, 2018. In addition, in 2017 the Company was subject to the onetime transition tax on accumulated foreign subsidiary earnings not previously subject to U.S. income tax. The Company is subject to a current and deferred federal tax rate of 21% as of January 31, 2019.

Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Act, the Company has made reasonable estimates of the effects and recorded provisional amounts in its financial statements as of January 31, 2018, as permitted by SAB 118. The accounting for the tax effects of the Tax Act have been completed as of January 31, 2019, and the Company recorded a tax expense of less than \$0.1 million related to the one-time transition tax.

One-time transition tax

The 2017 provisional estimate of the aggregate deferred foreign income inclusion of \$23.2 million was adjusted to \$22.2 million during 2018. At the time the provisional estimate was prepared, the Company expected to offset the inclusion with Net Operating Losses ("NOLs"). However, when preparing the tax return for the period the Company elected to claim foreign tax credits against the transition tax to preserve the NOLs. The net impact to the deferred balances was an increase in the NOL Deferred Tax Asset ("DTA") of \$4.9 million and a decrease in the foreign tax credit DTA of \$7.4 million. The changes in balances were offset by valuation allowances and did not impact tax expense. The transition tax of \$7.5 million was mostly offset by the use of foreign tax credit carryforwards, resulting in a net tax expense of less than \$0.1 million. There was no tax impact on the related adjustments to the deferred balances due to the Company applying a valuation allowance against the net deferred balances.

As a result of the onetime transition tax, the Company estimates that distributions from foreign subsidiaries will no longer be subject to U.S. tax. Earnings in the Company's subsidiaries in Canada, and Denmark, are not permanently reinvested, and earnings in the India subsidiary are partially permanently reinvested. The earnings will be subject to tax in their local jurisdiction, and the impact of the India dividend distribution tax and Canadian withholding taxes will be considered. As such, the Company has accrued a liability of \$0.4 million in 2018 related to these taxes.

U.S. income and foreign withholding taxes have not been recognized on the excess of the amount for financial reporting over the tax basis of investments in foreign subsidiaries that is indefinitely reinvested outside the United States. The Company intends to permanently reinvest the undistributed earnings of the Middle Eastern subsidiaries. The Middle Eastern subsidiaries have unremitted earnings of \$26.3 million as of January 31, 2019, all of which has been subject to the transition tax in the U.S. Unremitted earnings of \$18.7 million in the United Arab Emirates would not be subject to withholding tax in the event of a distribution, \$7.5 million of unremitted earnings in Saudi Arabia would be subject to withholding tax of \$1.5 million, and the \$4.6 million of earnings permanently reinvested in India would be subject to dividend distribution tax of \$0.9 million.

Deferred tax effects

As a result of the Tax Act, in 2017, the Company revalued deferred balances to a tax rate of 21% as of the date of enactment, which resulted in a tax expense of \$2.2 million and tax benefit of \$0.4 million related to a reduction in the federal benefit of state taxes. This tax expense was fully offset by a valuation allowance, therefore, there was no impact to the income statement.

Global intangible low taxed income ("GILTI")

Beginning for tax years starting after December 31, 2017, the Tax Act creates a new requirement that certain income (i.e., GILTI) earned by foreign subsidiaries must be included currently in the gross income of the U.S. shareholder. The Company has elected to account for the tax effects of these provisions in the period that is subject to such tax and the impact is reflected in the Company's full year provision. However, the inclusion of \$2.1 million during the period does not result in additional tax expense since the Company has NOL carryforwards and a valuation allowance applied against the net domestic deferred tax assets.

The difference between the provision for income taxes and the amount computed by applying the U.S. Federal statutory rate of 21% in 2018 and 33.83% in 2017 was as follows:

(In thousands)	2018	2017
Tax benefit at federal statutory rate	\$ 340 \$	(3,459)
Federal rate change	_	2,243
State benefit, net of federal income tax effect	145	(440)
Excess income tax on share-based compensation	_	(183)
Domestic valuation allowance	(2,612)	(1,206)
Domestic return to provision related to the 2017 transition tax	2,617	_
Global Intangible Low Tax Income Inclusion	438	_
Permanent differences other	126	162
Valuation allowance for state NOLs	76	297
Differences in foreign tax rate	334	732
Tax effects of Canadian acquisition amalgamation	_	(364)
Deferred tax on unremitted earnings	413	1,880
Foreign withholding taxes	252	245
All other, net expense	21	(140)
Total income tax expense/(benefit)	\$ 2,150 \$	(233)

The Company's worldwide effective tax rates ("ETR") were 132.7% and 2.3% in 2018 and 2017, respectively. The change in the ETR from the prior year to the current year is largely due to the fact that the Company is in a positive operating income position in certain taxable jurisdictions. Additional factors include the tax benefit of a Canadian business combination which was realized in 2017, and the valuation allowance against the domestic deferred tax asset. Due to this, even relatively small changes to ordinary income will have a large impact to the ETR. The income tax expense in 2018 is \$2.2 million, compared to income tax benefit of \$0.2 million in 2017. The Company accrues taxes in various countries where they are generating income while applying a valuation allowance in the U.S. which attributes to the unusually large ETR.

Components of deferred income tax assets (in thousands)	2018	2017
U.S. Federal NOL carryforward	\$ 7,480	\$ 1,795
Deferred compensation	382	341
Research tax credit	2,703	2,703
Foreign NOL carryforward	390	332
Foreign tax credit	2,305	9,749
Stock compensation	459	506
Other accruals not yet deducted	349	270
State NOL carryforward	2,552	2,157
Accrued commissions and incentives	643	423
Inventory valuation allowance	112	96
Other	159	81
Deferred tax assets, gross	17,534	18,453
Valuation allowance	(16,199)	(17,198)
Total deferred tax assets, net of valuation allowances	\$ 1,335	\$ 1,255
Components of the deferred income tax liability		
Depreciation	\$ (1,734)	\$ (1,941)
Foreign subsidiaries unremitted earnings	(498)	(101)
Prepaid	(80)	(64)
Total deferred tax liabilities	\$ (2,312)	\$ (2,106)
Deferred tax liability, net	\$ (977)	\$ (851)
Balance sheet classification		
Long-term assets	\$ 458	\$ 391
Long-term liability	(1,435)	(1,242)
Total deferred tax liabilities, net of valuation allowances	\$ (977)	\$ (851)

The Company has a gross U.S. Federal operating loss carryforward of \$35.6 million that will begin to expire in the year ending January 31, 2031.

The DTA for state NOL carryforwards of \$2.6 million relates to amounts that expire at various times from 2022 to 2031.

The Company has a DTA foreign NOL carryforward of \$0.4 million for its subsidiary in Saudi Arabia that can be carried forward indefinitely and does not have a valuation allowance recorded against it. The ultimate realization of this tax benefit is dependent upon the generation of sufficient operating income in the foreign tax jurisdictions.

The Company periodically reviews the adequacy of its valuation allowance in all of the tax jurisdictions in which it operates, evaluates future sources of taxable income and tax planning strategies and may make further adjustments based on management's outlook for continued profits in each jurisdiction.

For the year ending January 31, 2019, the Company has determined that there is not a greater than 50% likelihood that all of the domestic DTAs will be realized based on the available evidence. The Company recorded a full valuation allowance against the remaining domestic net DTAs on January 31, 2013 net of uncertain tax positions ("UTP"). The Company continues to have a valuation allowance on its domestic DTAs since domestic losses continue to be generated.

The Company has a deferred tax asset of \$2.3 million for U.S. foreign tax credits after considering the impact of the repatriated foreign earnings and the one-time transition tax. The foreign tax credit deferred tax asset is fully offset with a valuation allowance. The excess foreign tax credits are subject to a ten-year carryforward and will begin to expire in January 31, 2026.

The following table summarizes UTP activity, excluding the related accrual for interest and penalties:

(In thousands)	2018	2017
Balance at beginning of the year	\$ 1,301 \$	1,331
Increases in positions taken in a prior period	9	6
Increases in positions taken in a current period	147	5
Decreases due to lapse of statute of limitations	(10)	(34)
Decreases due to settlements	 _	(7)
Balance at end of the year	\$ 1,447 \$	1,301

Included in the total UTP liability were estimated accrued interest and penalty of less than \$0.1 million in both January 31, 2019 and January 31, 2018. These non-current income tax liabilities are recorded in other long-term liabilities in the consolidated balance sheet and recognized as an expense during the period. The Company's policy is to include interest and penalties in income tax expense. On January 31, 2019, the Company did not anticipate any significant adjustments to its unrecognized tax benefits within the next twelve months. Included in the balance on January 31, 2018 were amounts offset by deferred taxes (i.e., temporary differences) or amounts that could be offset by refunds in other taxing jurisdictions (i.e., corollary adjustments). Upon reversal, \$.3 million of the amount accrued on January 31, 2019 would impact the future ETR.

The Company is subject to income taxes in the U.S. federal jurisdiction, and various states and foreign jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. The Internal Revenue Service, ("IRS"), began an audit of the fiscal year ended January 31, 2015 in August 2016. In 2017, the tax audit concluded with no change made to the reported tax. Tax years related to January 31, 2015, 2016 and 2017 are open for federal and state tax purposes. In addition, federal and state tax years January 31, 2002 through January 31, 2009 are subject to adjustment on audit, up to the amount of research tax credit generated in those years. Any NOL carryover can still be adjusted by the IRS in future year audits.

The Company's management periodically estimates the probable tax obligations of the Company using historical experience in tax jurisdictions and informed judgments. There are inherent uncertainties related to the interpretation of tax regulations in the jurisdictions in which the Company transacts business. The judgments and estimates made at a point in time may change based on the outcome of tax audits, as well as changes to or further interpretations of regulations. If such changes take place, there is a risk that the tax rate may increase or decrease in any period. Tax accruals for tax liabilities related to potential changes in judgments and estimates for federal, foreign and state tax issues are included in other long-term liabilities on the consolidated balance sheet.

Note 9 - Retirement plans

Pension plan

The defined benefit plan that covered the hourly rate employees of a non-operating filtration business unit, previously located in Winchester, Virginia, was frozen on June 30, 2013 per the third Amendment to the Plan dated May 15, 2013. The accrued benefit of each participant was frozen as of the freeze date, and no further benefits shall accrue with respect to any service or hours of service after the freeze date. The benefits are based on fixed amounts multiplied by years of service of participants. The Company engages outside actuaries to calculate its obligations and costs. The funding policy is to contribute such amounts as are necessary to provide for benefits attributed to service to date. The amounts contributed to the plan are sufficient to meet the minimum funding requirements set forth in the Employee Retirement Income Security Act of 1974.

Asset allocation

The plans hold no securities of Perma-Pipe International Holdings, Inc.; 100% of the assets are held for benefits under the plan. The fair value of the major categories of the pension plans' investments are presented below. The FASB has established a fair value hierarchy that distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets and liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

<u>Level 1</u> - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

<u>Level 2</u> - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

<u>Level 3</u> - Inputs that are both significant to the fair value measurement and unobservable.

(In thousands)	2018	2017
Level 1 market value of plan assets		_
Equity securities	\$ 2,991	\$ 3,819
U.S. bond market	2,065	1,843
Real estate securities	368	199
Subtotal	 5,424	5,861
Level 2 significant other observable inputs		
Money market fund	\$ 121	\$ 171
Subtotal	121	171
Investments measured at net asset value*	\$ 634	\$ 668
Total	\$ 6,179	\$ 6,700

^{*} Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the reconciliation of benefit obligations, plan assets and funded status of plan.

On January 31, 2019, plan assets were held 63% in equity, 35% in debt and 2% in other. The investment policy is to invest all funds not needed to pay benefits and investment expenses for the year, with target asset allocations of approximately 60% equities, 30% fixed income and 10% alternative investments, diversified across a variety of sub-asset classes and investment styles, following a flexible asset allocation approach that will allow the plan to participate in market opportunities as they become available. The expected long-term rate of return on assets is based on historical long-term rates of equity and fixed income investments and the asset mix objective of the funds.

Investment market conditions in 2018 resulted in \$0.2 million actual loss on plan assets as presented below, which decreased the fair value of plan assets at year end. The Company did not change its 8% expected return on plan assets used in determining cost and benefit obligations, which is the return that the Company has assumed during every profitable and unprofitable investment year since 1991. The plan's investments are intended to earn long-term returns to fund long-term obligations, and investment portfolios with asset allocations similar to those of the plan's investment policy have attained such returns over several decades. Future contributions that may be necessary to maintain funding requirements are not expected to materially affect the Company's liquidity.

Minimann Minimannn Minimann	Reconciliation of benefit obligations, plan assets and funded status of plan			
Vested benefits \$ 6,258 \$ 6,658 Accumulated benefits \$ 6,258 \$ 6,658 Change in benefit obligation Benefit obligation - beginning of year \$ 6,658 \$ 6,500 Interest cost 240 253 Actuarial (gain) loss (303) 249 Benefits paid (337) (344) Benefit obligation - end of year \$ 6,258 \$ 6,658 Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets \$ 1,568 \$ 1,350 \$ 1,648 \$ 1,350 <	(in thousands)		2018	2017
Accumulated benefits \$ 6,258 \$ 6,658 Change in benefit obligation Benefit obligation - beginning of year \$ 6,658 \$ 6,500 Interest cost 240 253 Actuarial (gain)/loss (303) 249 Benefits paid (337) (344) Benefit obligation - end of year \$ 6,258 \$ 6,658 Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets \$ 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized in accumulated other comprehensive loss \$ 1,648 \$ 1,307 Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amou	Accumulated benefit obligations			_
Change in benefit obligation Benefit obligation - beginning of year \$ 6,658 \$ 6,500 Interest cost 240 253 Actuarial (gain)/loss (303) 249 Benefits paid (337) (344) Benefit obligation - end of year \$ 6,258 \$ 6,658 Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 8 16 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets \$ 1,568 \$ 1,350 Deferred compensation liabilities \$ (1,991) \$ (1,657) Net amount recognized in accumulated other comprehensive loss \$ (80) \$ 42 Amounts recognized in accumulated other comprehensive loss \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net	Vested benefits	\$	6,258	\$ 6,658
Benefit obligation - beginning of year \$ 6,658 \$ 6,500 Interest cost 240 253 Actuarial (gain)/loss (303) 249 Benefits paid (337) (344) Benefit obligation - end of year \$ 6,258 \$ 6,658 Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 8 16 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets \$ 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized in accumulated other comprehensive loss \$ 1,648 \$ 1,307 Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 End of year benefit obligation discount rate 3.	Accumulated benefits	\$	6,258	\$ 6,658
Interest cost 240 253 Actuarial (gain)/loss (303) 249 Benefits paid (337) (344) Benefit obligation - end of year \$ 6,258 \$ 6,658 Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets \$ 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized in accumulated other comprehensive loss (80) \$ 42 Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligation<				
Actuarial (gain)/loss (303) 249 Benefits paid (337) (344) Benefit obligation - end of year \$ 6,258 \$ 6,658 Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized in accumulated other comprehensive loss (1,991) (1,657) Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations 2018 2017 End of year benefit obligation discount rate 3.90% 3.70%	Benefit obligation - beginning of year	\$	6,658	\$ 6,500
Benefits paid (337) (344) Benefit obligation - end of year \$ 6,258 \$ 6,658 Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) \$ 16 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets \$ 1,568 \$ 1,350 Deferred compensation liabilities \$ (1,991) \$ (1,657) Net amount recognized \$ (80) \$ 42 Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations 2018 2017 End of year benefit obligation discount rate 3.90% 3.70%	Interest cost		240	
Benefit obligation - end of year \$ 6,258 \$ 6,658 Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized in accumulated other comprehensive loss (1,991) (1,657) Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations 2018 2017 End of year benefit obligation discount rate 3,90% 3,70%	Actuarial (gain)/loss		(303)	249
Change in plan assets Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized \$ (80) \$ 42 Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations 2018 2017 End of year benefit obligation discount rate 3.90% 3.70%	Benefits paid		(337)	(344)
Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized \$ (80) \$ 42 Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations 2018 2017 End of year benefit obligation discount rate 3.90% 3.70%	Benefit obligation - end of year	\$	6,258	\$ 6,658
Fair value of plan assets - beginning of year \$ 6,700 \$ 6,228 Actual (loss)/gain on plan assets (184) 816 Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized \$ (80) \$ 42 Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations 2018 2017 End of year benefit obligation discount rate 3.90% 3.70%	Change in plan assets			
Benefits paid (337) (344) Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized \$ (80) \$ 42 Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations 2018 2017 End of year benefit obligation discount rate 3.90% 3.70%		\$	6,700	\$ 6,228
Fair value of plan assets - end of year \$ 6,179 \$ 6,700 Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized \$ (80) \$ 42 Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations 2018 2017 End of year benefit obligation discount rate 3.90% 3.70%	Actual (loss)/gain on plan assets		(184)	816
Unfunded status \$ (80) \$ 42 Balance sheet classification Prepaid expenses and other current assets \$ 343 \$ 349 Other assets \$ 1,568 \$ 1,350 Deferred compensation liabilities \$ (1,991) \$ (1,657) Net amount recognized \$ (80) \$ 42 Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations End of year benefit obligation discount rate \$ 3.90% \$ 3.70%	Benefits paid		(337)	(344)
Balance sheet classificationPrepaid expenses and other current assets\$ 343\$ 349Other assets1,5681,350Deferred compensation liabilities(1,991)(1,657)Net amount recognized\$ (80)\$ 42Amounts recognized in accumulated other comprehensive lossUnrecognized actuarial loss\$ 1,648\$ 1,307Net amount recognized\$ 1,648\$ 1,307Weighted-average assumptions used to determine net cost and benefit obligations20182017End of year benefit obligation discount rate3.90%3.70%	Fair value of plan assets - end of year	\$	6,179	\$ 6,700
Prepaid expenses and other current assets Other assets 1,568 1,350 Deferred compensation liabilities (1,991) (1,657) Net amount recognized **Total Compensation liabilities** Unrecognized in accumulated other comprehensive loss Unrecognized actuarial loss Net amount recognized **Total Compensation liabilities** Unrecognized in accumulated other comprehensive loss Unrecognized actuarial loss **Total Compensation liabilities** **Total Compensation	Unfunded status	\$	(80)	\$ 42
Other assets1,5681,350Deferred compensation liabilities(1,991)(1,657)Net amount recognized\$ (80)\$ 42Amounts recognized in accumulated other comprehensive lossUnrecognized actuarial loss\$ 1,648\$ 1,307Net amount recognized\$ 1,648\$ 1,307Weighted-average assumptions used to determine net cost and benefit obligationsEnd of year benefit obligation discount rate3.90%3.70%	Balance sheet classification			
Deferred compensation liabilities(1,991)(1,657)Net amount recognized\$ (80)\$ 42Amounts recognized in accumulated other comprehensive lossUnrecognized actuarial loss\$ 1,648\$ 1,307Net amount recognized\$ 1,648\$ 1,307Weighted-average assumptions used to determine net cost and benefit obligations20182017End of year benefit obligation discount rate3.90%3.70%		\$		
Net amount recognized \$\frac{\$(80)}{\$}\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	Other assets		1,568	1,350
Amounts recognized in accumulated other comprehensive loss Unrecognized actuarial loss \$ 1,648 \$ 1,307 Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations End of year benefit obligation discount rate 3.90% 3.70%	Deferred compensation liabilities		(1,991)	(1,657)
Unrecognized actuarial loss\$ 1,648\$ 1,307Net amount recognized\$ 1,648\$ 1,307Weighted-average assumptions used to determine net cost and benefit obligations20182017End of year benefit obligation discount rate3.90%3.70%	Net amount recognized	\$	(80)	\$ 42
Unrecognized actuarial loss\$ 1,648\$ 1,307Net amount recognized\$ 1,648\$ 1,307Weighted-average assumptions used to determine net cost and benefit obligations20182017End of year benefit obligation discount rate3.90%3.70%	Amounts recognized in accumulated other comprehensive loss			
Net amount recognized \$ 1,648 \$ 1,307 Weighted-average assumptions used to determine net cost and benefit obligations End of year benefit obligation discount rate \$ 3.90% \$ 3.70%		\$	1,648	\$ 1,307
End of year benefit obligation discount rate 3.90% 3.70%	Net amount recognized	\$	1,648	\$ 1,307
End of year benefit obligation discount rate 3.90% 3.70%	Weighted-average assumptions used to determine net cost and benefit obligations		2018	2017
		-		
Service cost discount rate 4.00%	Service cost discount rate		3.70%	4.00%
Expected return on plan assets 8.00% 8.00%				

The discount rate was based on a Citigroup pension discount curve of high quality fixed income investments with cash flows matching the plans' expected benefit payments. The Company determines the expected long-term rate of return on plan assets by performing a detailed analysis of historical and expected returns based on the strategic asset allocation approved by the Board of Directors and the underlying return fundamentals of each asset class. The Company's historical experience with the pension fund asset performance is also considered.

Components of net periodic benefit cost (in thousands)	 2018	2017
Interest cost	\$ 240 \$	253
Expected return on plan assets	(522)	(484)
Recognized actuarial loss	64	82
Net periodic benefit income	\$ (218) \$	(149)
Amounts recognized in other comprehensive income (in thousands)		
Actuarial gain/(loss) on obligation	\$ 303 \$	(249)
Actual (loss)/gain on plan assets	(644)	414
Total in other comprehensive income	\$ (341) \$	165

Other comprehensive income is also affected by the tax effect of the valuation allowance recorded on the domestic deferred tax assets.

Cash flows (in thousands) Expected employer contributions for the fiscal year ending January 31, 2020 \$ Expected employee contributions for the fiscal year ending January 31, 2020 Estimated future plan benefit payments reflecting expected future service for the fiscal year(s) ending January 31,: 2020 344 2021 338 2022 344 2023 344 2024 338 2025 - 2029 1708

401(k) plan

The domestic employees of the Company participate in the PPIH 401(k) Employee Savings Plan, which is applicable to all employees except employees covered by collective bargaining agreement benefits. The plan allows employee pretax payroll contributions from 1% to 16% of total compensation. The Company matches 100% of each participant's payroll deferral contributions up to 1% of their compensation, plus 50% of each participant's payroll deferral contributions on the next 5% of compensation.

Contributions to the 401(k) plan were \$0.3 million each in years ended January 31, 2019 and 2018.

Multi-employer plans

The Company contributes to a multi-employer plan for certain collective bargaining U.S. employees. The risks of participating in this multi-employer plan are different from a single employer plan in the following aspects:

- Assets contributed to the multi-employer plans by one employer may be used to provide benefits to employees of other participating employers.
- If a participating employer ceases contributing to the plan, the unfunded obligations of the plan may be inherited by the remaining participating employers.
- If the Company chooses to stop participating in the multi-employer plan, the Company may be required to pay those plans an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

The Company has assessed and determined that the multi-employer plans to which it contributes are not significant to the Company's consolidated financial statements. The Company does not expect to incur a withdrawal liability or expect to significantly increase its contribution over the remainder of the contract period. The Company made contributions to the bargaining unit supported multi-employer pension plans (in thousands):

			Funded					Collective Bargaining
		Plan	Zone	FIP/RP Status	2018	2017	Surcharge	Expiration
Plan Name	EIN	#	Status	Pending/Implemented	Contribution	Contribution	Imposed	Date
Plumbers & Pipefitters Local 572 Pension Fund	626102837	001	Green	No	\$188	\$209	No	3/31/2022

Note 10 - Stock-based compensation

At January 31, 2019, the Company had one incentive stock plan under which new equity incentive awards may be granted:

• 2017 Omnibus Stock Incentive Plan as Amended June 13, 2017, as amended, which stockholders approved in June 2017 ("2017 Plan")

The Company has prior incentive plans under which previously granted awards remain outstanding, but under which no new awards may be granted. At January 31, 2019, the Company had reserved a total of 834,182 shares for grants and issuances under these incentive stock plans, which includes a reserve for issuances pursuant to unvested or unexercised prior awards, and shares for new grants or issuances pursuant to the 2017 Plan.

While the 2017 Plan provides for the grant of deferred shares, non-qualified stock options, incentive stock options, restricted shares, restricted stock units, and performance-based restricted stock units intended to qualify under section 422 of the Internal Revenue Code, to date the Company has issued only restricted shares and restricted stock units under the 2017 Plan and currently intends to continue this practice. The 2017 Plan authorizes awards to officers, employees, consultants, and directors.

Stock compensation expense

The Company recognized the following stock based compensation expense:

(In thousands)	2018	2017
Stock-based compensation expense	\$ 33	\$ 94
Restricted stock based compensation expense	1,132	1,353
Total stock-based compensation expense	\$ 1,165	\$ 1,447

Stock options

Options vest ratably over 4 years and are exercisable for up to ten years from the date of grant. To cover the exercise of vested options, the Company issues new shares from its authorized but unissued share pool. The Company calculates all stock compensation expense based on the grant date fair value of the option and recognizes expense on a straight-line basis over the four-year vesting period of the option.

The following summarizes the activity related to options outstanding under all plans for the years ended January 31, 2018 and 2019. The Company did not grant any stock options in 2017 or 2018.

(Shares in thousands)	Options	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
Outstanding on January 31, 2017	52	\$ 11.55	4.5	\$ 534
Exercised	(35)	6.80		45
Expired or forfeited	(131)	18.54		
Outstanding on January 31, 2018	358	9.44	4.0	482
Options exercisable on January 31, 2018	327	\$ 9.56	3.7	433
Exercised	(77)	6.83		162
Expired or forfeited	(63)	16.2		
Outstanding on January 31, 2019	218	8.6	3.8	257
Options exercisable on January 31, 2019	207	\$ 8.69	3.6	\$ 239

The Company received \$0.5 million and \$0.2 million in 2018 and 2017, respectively, for stock options exercised.

Unvested options outstanding (shares in thousands)	Options	g	Veighted- average grant date fair value	ggregate ntrinsic value
Outstanding on January 31, 2018	31	\$	8.24	\$ 50
Granted	_			
Vested	(14)			
Expired or forfeited	(6)		8.12	
Outstanding on January 31, 2019	11	\$	7.00	\$ 19

The fair value of stock options vested was \$0.1 million in both 2018 and 2017, respectively. Based on historical experience the Company expects 94% of these options to vest.

As of January 31, 2019, there was less than \$0.1 million of unrecognized compensation cost related to unvested stock options granted under the plans. That cost is expected to be recognized over the weighted-average period of 1.2 years.

Deferred stock

As part of their compensation, each year the Company will grant deferred stock units to each non-employee director, equal to the result of dividing the award amount by the fair market value of the common stock on the date of grant. The stock vests on the date of grant, however it is only distributed to the directors upon their separation from service. In June 2018 the Company granted 21,450 deferred stock units from the 2017 Plan, and as of January 31, 2019, there were approximately 101,945 deferred stock units outstanding included in the restricted stock activity shown below.

As a result of certain events that occurred during second quarter of fiscal 2018, including a settlement of a stock-based award previously granted to a retiring member of the Company's Board of Directors, the Company changed its method of accounting for deferred stock compensation arrangements granted to the Company's directors from liability accounting treatment to equity accounting treatment and, as such, reclassified \$0.7 million from a liability to additional paid in capital.

(In thousands)	2018	2017
Deferred compensation liabilities	\$ - \$	815

Restricted stock

The Company has granted restricted stock to executive officers and employees. The restricted stock vest ratably over three to four years. The Company calculates restricted stock compensation expense based on the grant date fair value and recognizes expense on a straight-line basis over the vesting period. The following table summarizes restricted stock activity for the years ended January 31, 2018 and 2019, respectively:

(Shares in thousands)			0		egate c value
Outstanding on January 31, 2017	290	\$	8.75	\$	2,533
Granted	178		8.06		
Issued	(101)				
Forfeited	(7)		7.15		
Outstanding on January 31, 2018	360	\$	9.05	\$	3,254
Granted	148		9.76		
Issued	(94)				
Forfeited	(131)		7.92		
Outstanding on January 31, 2019	283	\$	8.74	\$	2,476

The fair value of restricted stock vested was \$1.1 million and \$1.0 million in 2018 and 2017, respectively. As of January 31, 2019, there was \$1.2 million of unrecognized compensation cost related to unvested restricted stock granted under the plans. That cost is expected to be recognized over the weighted-average period of 2.2 years.

Note 11 - Stock rights

On September 15, 2009, the Company entered into the Amendment ("Amendment") to Rights Agreement dated as of September 15, 1999. Among other things, the Amendment extends the term of the Rights Agreement until September 15, 2019 and amends definitions to include positions in derivative instruments related to the Company's common stock as constituting beneficial ownership of such stock.

On September 15, 1999, the Company's Board of Directors declared a dividend of one common stock purchase right (a "Right") for each share of PPIH's common stock outstanding at the close of business on September 22, 1999. The stock issued after September 22, 1999 and before the redemption or expiration of the Rights is also entitled to one Right for each such additional share. Each Right entitles the registered holders, under certain circumstances, to purchase from the Company one share of PPIH's common stock at \$25, subject to adjustment. At no time will the Rights have any voting power.

The Rights may not be exercised until 10 days after a person or group acquires 15% or more of the Company's common stock, or announces a tender offer that, if consummated, would result in 15% or more ownership of the Company's common stock. Separate Rights certificates will not be issued, and the Rights will not be traded separately from the stock until then. Should an acquirer become the beneficial owner of 15% or more of the Company's common stock, Rights holders other than the acquirer would have the right to buy common stock in PPIH, or in the surviving enterprise if PPIH is acquired, having a value of two times the exercise price then in effect. Also, the PPIH Board of Directors may exchange the Rights (other than those of the acquirer, which will have become void), in whole or in part, at an exchange ratio of one share of PPIH common stock (and/or other securities, cash or other assets having equal value) per Right subject to adjustment. The Rights described in this paragraph and the preceding paragraph shall not apply to an acquisition, merger or consolidation approved by the Company's Board of Directors.

The Rights will expire on September 15, 2019, unless exchanged or redeemed prior to that date. The redemption price is \$0.01 per Right. PPIH's Board of Directors may redeem the Rights by a majority vote at any time prior to the 20th day following public announcement that a person or group has acquired 15% of PPIH common stock. Under certain circumstances, the decision to redeem requires the concurrence of a majority of the independent directors.

Note 12 - Interest expense, net

(In thousands)	2018	2017
Interest expense	\$ 1,286	\$ 808
Interest income	(164)	(111)
Interest expense, net	\$ 1,122	\$ 697

Schedule II

Perma-Pipe International Holdings, Inc. and Subsidiaries VALUATION AND QUALIFYING ACCOUNTS For the Years Ended January 31, 2019 and 2018

(In thousands)	Balance at beginning of period	Charges to expenses	Write-offs (1)	Other charges/reversals) (2)	Balance at end of period
Year Ended January 31, 2019					
Allowance for possible losses in collection of trade					
receivables	\$ 469	\$ 140	\$ (272)	\$ 199	\$536
Year Ended January 31, 2018					
Allowance for possible losses in collection of trade					
receivables	\$ 305	\$ 247	\$ (135)	\$ 52	\$469

- (1) Uncollectible accounts charged off.
- (2) Primarily related to recoveries from accounts previously charged off and currency translation.

EXHIBIT INDEX

The exhibits listed below are filed herewith except the exhibits described below as incorporated by reference. Exhibits not filed herewith are incorporated by reference to such exhibits filed by the Company under the location set forth under the caption "Description and Location" below. The Commission file number for the Company's Exchange Act filings referenced below is 0-

18370. Exhibit No. **Description and Location** 3(i) Certificate of Incorporation of Perma-Pipe International Holdings, Inc. [Incorporated by reference to Exhibit 3.3 to Registration Statement No. 33-70298] Certificate of Amendment to Certificate of Incorporation of Perma-Pipe International Holdings, Inc. [Incorporated by 3(ii) reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 20, 2017] Fourth Amended and Restated By-Laws of Perma-Pipe International Holdings, Inc. [Incorporated by reference to Exhibit 3(iii) 3.2 to the Company's Current Report on Form 8-K filed on February 22, 2018] 4(a) Specimen Common Stock Certificate [Incorporated by reference to Exhibit 4 to Registration Statement No. 33-70794] Rights Agreement [Incorporated by reference to Exhibit 4.1 of the Company's [Current Report on Form 8-K filed on 4(b) September 24, 1999] Amendment to Rights Agreement [Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-4(c) K filed on September 17, 2009] 2001 Independent Directors Stock Option Plan, [Incorporated by reference to Exhibit (d)(5) to the Company's Schedule 10(a) TO filed on May 25, 2001] * 10(b)Form of Directors and Officers Indemnification Agreement [Incorporated by reference to Exhibit 10.1 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2006 filed on May 15, 2006] * 10(c) MFRI 2004 Stock Incentive Plan [Incorporated by reference to Exhibit 10(e) to the Company's Annual Report on Form 10-K/A for the fiscal year ended January 31, 2004 filed on June 1, 2004] * 10(d)Report on Form 10-K for the fiscal year ended January 31, 2010 filed on April 19, 2010]* 10(e)

- 2009 Non-Employee Directors Stock Option Plan [Incorporated by reference to Exhibit 10(k) to the Company's Annual
- 2013 Omnibus Stock Incentive Plan as Amended June 14, 2013 [Incorporated by reference to Exhibit 10.1 to the
- Company's Current Report on Form 8-K filed on June 17, 2013] *
- Credit and Security Agreement between the Company and BMO Harris Bank, N.A. dated September 24, 2014 10(f)[Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on December 9, 2014]
- First Amendment to Credit and Security Agreement between the Company and BMO Harris Bank, N.A. dated February 10(g)5, 2015 [Incorporated by reference to Exhibit 10(m) to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2015 filed on April 16, 2015]
- Limited Waiver and Second Amendment to Credit and Security Agreement between the Company and BMO Harris Bank. 10(h)N.A. dated April 30, 2015 [Incorporated by reference to Exhibit 10 to the Company's Quarterly Report on Form 10-Q filed on June 12, 2015]
- 10(i) Consent and Third Amendment to Credit and Security Agreement between the Company and BMO Harris Bank, N.A. dated January 29, 2016 [Incorporated by reference to Exhibit 10(n) to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2016 filed on April 28, 2016]
- 10(j) Fourth Amendment to Credit and Security Agreement between the Company and BMO Harris Bank, N.A. dated February 29, 2016 [Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 2,
- Fifth Amendment to Credit and Security Agreement between the Company and BMO Harris Bank, N.A. dated October 10(k)25, 2016 [Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 27,
- 10(1) Sixth Amendment to Credit and Security Agreement between the Company and BMO Harris Bank, N.A. dated December 29, 2016 [Incorporated by reference to Exhibit 10(m) to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2017 filed on April 14, 2017]
- Seventh Amendment to Credit and Security Agreement between the Company and BMO Harris Bank, N.A.dated 10(m)December 14, 2017. [Incorporated by reference to Exhibit 10(m) to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2018 filed on April 19, 2018]
- 10(n)Limited Waiver and Eighth Amendment to Credit and Security Agreement between the Company and Bank of Montreal, as successor by assignment to BMO Harris Bank N.A., dated June 5, 2018 [Incorporated by reference to Exhibit 10(a) to the Company's Quarterly Report on Form 10-Q filed on June 12, 2018]
- 10(0)Ninth Amendment to Credit and Security Agreement between the Company and Bank of Montreal, as successor by assignment to BMO Harris Bank N.A., dated August 1, 2018 [Incorporated by reference to Exhibit 10(a) to the Company's Quarterly Report on Form 10-Q filed on September 11, 2018]

EXHIBIT INDEX

	EXHIBIT INDEX
10(p)	Asset Purchase Agreement dated as of January 29, 2016 by and among MFRI, Inc., TDC Filter Manufacturing Inc. and BHA Altair, LLC [Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on
	February 4, 2016]
10(s)	Agreement with Bradley Mautner dated January 31, 2017 [Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 3, 2017]*
10(t)	Employment agreement with Karl J. Schmidt dated March 17, 2017 [Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 20, 2017]*
10(u)	2017 Omnibus Stock Incentive Plan as Amended June 13, 2017 [Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on September 19, 2017] *
10(v)	Form of Restricted Stock Unit Agreement under the 2017 Omnibus Stock Incentive Plan as Amended June 13, 2017 [Incorporated by reference to Exhibit 10(b) to the Company's Quarterly Report on Form 10-Q filed on September 11, 2018]*
10(w)	Revolving Credit and Security Agreement, dated September 20, 2018, by and among the Company, PNC Bank, National Association, and the other parties thereto [Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on September 24, 2018]
10(x)	Executive Employment Agreement, dated October 1, 2018, by and between the Company and D. Bryan Norwood [Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 1, 2018]*
10(y)	Letter Agreement, dated September 28, 2018, by and between the Company and Karl J. Schmidt [Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on October 1, 2018]*
14	Code of Conduct [Incorporated by reference to Exhibit 14 of the Company's Annual Report on Form 10-K/A for the fiscal year ended January 31, 2004 filed on June 1, 2004]
21	Subsidiaries of Perma-Pipe International Holdings, Inc.
23	Consent of Independent Registered Public Accounting Firm - Grant Thornton LLP
24	Power of Attorney executed by directors and officers of the Company
31	Rule 13a - 14(a)/15d - 14(a) Certifications
	(1) Chief Executive Officer certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002(2) Chief Financial Officer certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Section 1350 Certifications(1) Chief Executive Officer certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002(2) Chief Financial Officer certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation
101.DEF	XBRL Taxonomy Extension Definition
101.LAB	XBRL Taxonomy Extension Labels
101.PRE	XBRL Taxonomy Extension Presentation
*M	anagement contracts and compensatory plans or agreements

Item 16. FORM 10-K SUMMARY - None.

SIGNATURES

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

Date: April 16, 2019

CYNTHIA BOITER*

*By: /s/ David J. Mansfield

David J. Mansfield

Perma-Pipe International Holdings, Inc.

Director, President and Chief Executive Officer

)

/s/ David J. Mansfield
David J. Mansfield

	(Principal Executive Officer)			
	the Securities Exchange Act of 1934, this report has been signed below by in the capacities and on the date indicated.	the follo	owing persons	
DAVID J. MANSFIELD	Director, President and Chief Executive Officer (Principal Executive Officer)	e)		
D. BRYAN NORWOOD*	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer))	April 16, 2019	
DAVID S. BARRIE*	Director and Chairman of the Board of Directors)		
DAVID B. BROWN*	Director)		
JEROME T. WALKER*	Director)		

Director

Individually and as Attorney in Fact

PERMA-PIPE®

DIRECTORS & OFFICERS

DIRECTORS

David S. Barrie

Independent Director & Chairman of the Board of Directors

Principal, Barrie International, LLC

David J. Mansfield

Director

President & Chief Executive Officer

Perma-Pipe International Holdings, Inc.

Cynthia Boiter

Independent Director Chief Financial Officer

Chemicals Division of Milliken &

Company

Jerome T. Walker

Independent Director Chief Executive Officer

Caribbean Distributed Energy, LLC

David B. Brown

Independent Director Chief Financial Officer Weir Flow Control

OFFICERS

David J. Mansfield

President &

Chief Executive Officer

D. Bryan Norwood

Vice President &

Chief Financial Officer

Wayne M. Bosch

Vice President &

Chief Human Resources Officer

OPERATIONS MANAGEMENT

Grant Dewbre

Senior Vice President

Middle East North Africa

Scott James

Senior Vice President

Americas

Annual Meeting

Thursday, June 20, 2019 10:00 a.m. Central Time

Online at: virtualshareholdermeeting.com/PPIH2019

Independent Registered Public Accountants

Grant Thornton LLP 175 West Jackson Blvd. Chicago, IL 60604-2615

Transfer Agent

Broadridge P.O. Box 1342

Brentwood, NY 11717

GLOBAL LOCATIONS

CORPORATE HEADQUARTERS

Perma-Pipe International Holdings, Inc.

6410 W. Howard Street Niles, Illinois 60714 (847) 966-1000 permapipe.com

OFFICES & MANUFACTURING FACILITIES

Perma-Pipe, Inc.

Sales Office 6410 W. Howard Street Niles, Illinois 60714 (847) 966-2235

Perma-Pipe Oil & Gas Sales Office 24900 Pitkin, Suite 290 Spring, Texas 77386 (281) 292-8615

Manufacturing Plant 1310 Quarles Drive Lebanon, Tennessee 37087 (615) 444-4910

Manufacturing Plant 5008-11 Curtis Lane New Iberia, Louisiana 70560 (337) 560-9116

Perma-Pipe Canada, Ltd.

Sales Office #1600, 407 2nd Street SW Calgary, Alberta T2P 2Y3 Canada (403) 264-4880

Manufacturing Plant 5233 39th Street Camrose, Alberta T4V 4R5 Canada (780) 672-2345

Perma-Pipe Middle East FZC, Ltd.

Sales Office & Manufacturing Plant Fujairah Free Zone 2 Fujairah, United Arab Emirates 971-4-607-2000

Sales Office Block A; Suite AG 06-07 Headquarters Building PO Box 4988 Dubai Silicon Oasis Dubai, United Arab Emirates 971-4-607-2010

Perma-Pipe Saudi Arabia, LLC

Manufacturing Plant Plot #F-21/1 Dammam Industrial City 2 Al Khobar, Saudi Arabia 31198 966-3-812-3039

Perma-Pipe India Pvt. Ltd.

Sales Office 804 8th Floor Palm Spring Centre Malad Link Road Malad (W), Mumbai 400 064 91-22-4003-6007

Manufacturing Plant Survey #197, Godown 11, Village Mithi Rohar, Gandhidham Kutch Gujarat, India 370240 91-22-4003-6008

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