

TOR MINERALS INTERNATIONAL INC  
Form 10-K  
March 09, 2017

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**FORM 10-K**

(Mark One)

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

**For the fiscal year ended December 31, 2016**

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

**Commission File Number 0-17321**

**TOR Minerals International, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of incorporation or organization)

**74-2081929**

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

**722 Burleson Street**

**Corpus Christi, Texas**

**78402**

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

**(361) 883-5591**

(Registrant's telephone number, including area code)

Securities registered pursuant section 12(b) of the Act:

Title of each class	Name of exchange on which registered
<b>Common Stock, \$0.25 par value</b>	<b>NASDAQ Capital Market</b>

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.  
Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if the disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in, definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this form 10-K.  
☒

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

Edgar Filing: TOR MINERALS INTERNATIONAL INC - Form 10-K

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting  
company ☒  
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the common stock, the Registrant's only common equity, held by non-affiliates of the registrant (based upon the closing sale price of the registrant's Common Stock on the NASDAQ Capital Market tier of the NASDAQ Stock Market on June 30, 2016) was approximately \$6,601,000. Shares of common stock held by each executive officer and director and by each entity that owns 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 9, 2017, there were 3,541,703 shares of the registrant's common stock outstanding.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement to be filed with the Securities and Exchange Commission relative to the Company's 2017 Annual Meeting of Stockholders are incorporated by reference into Part III of this Report.

---

**TOR MINERALS INTERNATIONAL, INC.**  
**Annual Report on Form 10-K**

**Table of Contents**

	<b>Page</b>
<b>PART I</b>	
Item 1. <u>Business</u>	4
Item 1 A. <u>Risk Factors</u>	9
Item 1 B. <u>Unresolved Staff Comments</u>	14
Item 2. <u>Properties</u>	14
Item 3. <u>Legal Proceedings</u>	15
Item 4. <u>Mine Safety Disclosures</u>	15
<b>PART II</b>	
Item 5. <u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	16
Item 6. <u>Selected Financial Data</u>	16
Item 7. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	17
Item 7A <u>Quantitative and Qualitative Disclosures About Market Risks</u>	32
Item 8. <u>Financial Statements and Supplementary Data</u>	32
Item 9. <u>Changes In and Disagreements with Accountants on Accounting and Financial Disclosure</u>	32
Item 9 A. <u>Controls and Procedures</u>	32
Item 9 B. <u>Other Information</u>	33
<b>PART III</b>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	33
Item 11. <u>Executive Compensation</u>	34
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	34
Item 13. <u>Certain Relationships and Related Transaction, and Director Independence</u>	36
Item 14. <u>Principal Accountant Fees and Services</u>	36
<b>PART IV</b>	
Item 15. <u>Exhibits and Financial Statement Schedules</u>	37
Item 16. <u>None</u>	
<b><u>SIGNATURES</u></b>	40



*Forward-Looking Statements*

*This Annual Report on Form 10-K (the “Report”), including “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7, contains forward-looking statements about the business, financial condition and prospects of TOR Minerals International, Inc. (the “Company”). The actual results of the Company could differ materially from those indicated by the forward-looking statements because of various risks and uncertainties including, without limitation, changes in demand for the Company’s products, changes in competition, economic conditions, fluctuations in exchange rates, changes in the cost of energy, fluctuations in market price for titanium dioxide (“TiO<sub>2</sub>”) pigments, interest rate fluctuations, changes in the capital markets, changes in tax and other laws and governmental rules and regulations applicable to the Company’s business, and other risks indicated in the Company’s filing with the Securities and Exchange Commission, including those set forth in this report under Item 1A. Risk Factors. These risks and uncertainties are beyond the ability of the Company to control, and, in many cases, the Company cannot predict all of the risks and uncertainties that could cause its actual results to differ materially from those indicated by the forward-looking statements. When used in this report, the words “believes,” “estimates,” “plans,” “expects,” “anticipates,” “foresees,” “intends,” “may,” “likely,” “could,” “should” and similar expressions as they relate to the Company or its management are intended to identify forward-looking statements.*

- 3 -

---

## PART I

### Item 1. Business

#### General

TOR Minerals International, Inc. (“TOR”, “we”, “us”, “our” or the “Company”) is a global producer of high performance, specialty mineral products focused on product innovation and technical support. Our specialty mineral products, which include flame retardant and smoke suppressant fillers, engineered fillers, and titanium dioxide (“TiO<sub>2</sub>”) color hybrid pigments, are designed for use in plastics, coatings, paints and catalysts applications, as well as a wide range of other industrial applications.

We were organized as a subsidiary of the Benilite Corporation of America (“Benilite”) in 1973. In 1980, the subsidiary was spun off to its shareholders. In December 1988, the Company became a publicly owned company after completing a public offering of 1.38 million shares of its common stock. Our stock trades on Nasdaq under the ticker symbol TORM.

#### Global Headquarters

We are headquartered in Corpus Christi, Texas, United States. This location houses senior management, customer service, logistics, and corporate research and development/technical service laboratories. Our financial and accounting functions also operate from this location. Our principal offices in Corpus Christi are located at 722 Burleson Street, Corpus Christi, Texas 78402, and our telephone number is (361) 883-5591. Our website is located at [www.torminerals.com](http://www.torminerals.com). Information contained in our website and links contained on our website are not part of this Annual Report on Form 10-K.

#### United States (“U.S.”) Operations



Our U.S. manufacturing plant, located in Corpus Christi, Texas, is situated on the north side of the Corpus Christi Ship Channel and has its own dock frontage at the plant. We also utilize the Bulk Terminal, operated by the Port of Corpus Christi Authority (the “Port”), to discharge bulk shipments of barite from cargo vessels directly into trucks for delivery to our plant. The site has its own railhead and easy access to major highways linking it to the rest of the United States and to Mexico. Our products, HITOX®, BARTEX®, HALTEX®, OPTILOAD® and TIOPREM®, are all produced at this location.

#### Asian Operations

We acquired our Asian operation, TOR Minerals Malaysia, Sdn. Bhd. (“TMM”), in 2000. Located in Ipoh, Perak, Malaysia, close to the port of Lumut, TMM produces HITOX and TIOPREM which are sold primarily in Asia and Europe. The sales team and the quality assurance laboratory for Asia are located at the offices in Ipoh.

In 2015, we made a strategic decision to take our Synthetic Rutile (“SR”) production capacity out of service. SR is a precursor material used in the production of HITOX and TIOPREM. We are currently supplementing our existing SR inventory with product produced by alternate sources. By making this strategic move, we have reduced the cost of our SR and reduced our inventory levels during 2016.

#### European Operations

In 2001, we acquired our European operation, TOR Processing and Trade, B.V. (“TPT”), situated within reach of the major shipping port of Rotterdam. TPT, located in Hattem, The Netherlands, specializes in the manufacturing of premium alumina products ALUPREM® and BAYRPREM® for use worldwide. Customer applications, quality assurance laboratory and support facilities for Europe are located in Hattem. Our global headquarters in Texas provide customer service and shipping logistics for TPT’s North American customers.

## **Our Products**

TOR and its subsidiaries operate in the business of mineral product manufacturing in three geographic segments. All U.S. manufacturing is done at the facility located in Corpus Christi, Texas. Foreign manufacturing is done by the Company's wholly-owned subsidiaries, TMM and TPT. Our products are currently marketed in the United States and in more than 60 other countries. We sell our products through a network of direct sales representatives employed by the Company and independent stocking distributors in the United States, as well as distributors and agents overseas. Our sales representatives sell directly to end-users and provide technical support and market guidance for our independent distribution network.

Below is a list of our current specialty mineral products and a brief description of the unique characteristics which lend to the high performance of these specialty products.

### **ALUPREM**

Premium Alumina Trihydrate ("ATH") and Boehmite ("AMH") products are produced at our European operation and are designed for the most demanding worldwide applications. In-house engineered surface treatment is available for enhanced performance benefits.

ALUPREM TB and SR Boehmite alumina products are suitable for a broad range of applications including wire and cable, catalysts, high-tech polishing, coatings and pigments. Performance benefits include high temperature flame retardant, improved mechanical properties and scratch resistance, good resin compatibility and high brightness.

ALUPREM XHL is specially designed ATH for "Extra High Loading" to meet more stringent flame retardant and smoke suppressant requirements for sheet molding compound ("SMC"), bulk molding compound ("BMC"), pultrusion and other thermoset composite applications.

ALUPREM TA Bayer and TG ultra-white / translucent grade ATH products are designed for color critical applications like solid surface and performance driven uses such as wire and cable.

### **HITOX**

HITOX (high grade  $\text{TiO}_2$ ) is a high quality, cost-effective, beige colored titanium dioxide pigment produced at both our U.S. and Asian operations. In products which require opacity and color, HITOX can reduce the amount of expensive organic and inorganic pigments as well as white  $\text{TiO}_2$ . HITOX is used in a broad range of paint and coatings and plastics applications including architectural, coil backers, powder, container, wood, traffic, paper, primers, adhesive and sealants, roof coatings and PVC.

#### **BARTEX and BARYPREM**

High whiteness and brightness, chemical inertness and controlled particle sizing are features of BARTEX. Barium Sulfate's high density is one of the primary reasons it is used as a pigment. Suitable for use in both acid and basic conditions, BARTEX gives weight and body to products ranging from powder coatings to rubber products and plastics. BARTEX is also used as an extender pigment in top coats and primers.

#### **OPTILOAD**

OPTILOAD ATH, specially developed for "Optimum Loading", offers a halogen-free solution for passing the most stringent flame retardant and smoke suppressant requirements. With increasing legislative concerns over smoke and toxicity associated with older halogenated systems, interest in re-formulation with OPTILOAD is growing. Produced at our U.S. operation, the low viscosity OPTILOAD series offers high performance in a wide range of thermoset composite applications including SMC, BMC, pultrusion, resin infusion and spray-up / hand lay-up.

#### **HALTEX**

HALTEX ATH is an economical, non-toxic, flame retardant and smoke suppressant filler produced at our U.S. operation for supply to the North American market. HALTEX features tightly controlled particle sizing to meet specific application performance requirements. Quality is suitable for a broad range of uses including electrical components, SMC, BMC, adhesives and sealants, roof coatings, foam insulation and rubber mining belts.

### **TIOPREM**

TIOPREM is a high performance  $\text{TiO}_2$  colored hybrid pigment produced at both the U.S. and Asian operations. TIOPREM offers excellent heat stability making it suitable for use in high temperature resins and coatings. Typical applications are plastic master batch, color concentrates and liquid color. TIOPREM exhibits good opacity and is cost-effective in formulation, partially replacing more expensive heat stable pigments as well as white  $\text{TiO}_2$ .

### **Raw Materials and Energy**

We utilize a variety of raw materials in the manufacturing of our products. Outlined below are the principal raw materials for TOR's products.

*ALUPREM:* Alumina trihydrate, the chief raw material for ALUPREM, is manufactured throughout the world including Europe and North America. The ATH material used for chemicals, fillers and flame-retardants is produced by the Bayer alumina process. This grade of ATH accounts for approximately 95% of the total ATH produced worldwide. The Company purchases ATH from various suppliers in Europe. The average prices for ATH remained stable in 2016.

*BARTEX / BARYPREM:* High grade barites (barium sulfate) are mined in China, India, Turkey and Mexico and are the raw materials used to produce our BARTEX and BARYPREM product lines. The average price for this grade of barites remained stable in 2016. The availability of finer grade barites in China are declining, which could lead to higher prices in the future.

*HALTEX / OPTILOAD:* Bayer grade aluminum hydroxide, used to produce HALTEX, is purchased from one of four suppliers located in the U.S. The average price for the Bayer grade aluminum hydroxide remained stable in 2016, however, the U.S. supply is expected to decrease in the coming year which could have a negative impact on our pricing structure.

*HITOX / TIOPREM:* Historically, SR, the primary raw material used in the production of our HITOX and TIOPREM, was manufactured at TMM. However, during the later part of 2014 and 2015, we secured two alternate sources of SR and discontinued manufacturing our own SR. As a result of this strategic move, the average price of SR was reduced in 2016 and we anticipate the cost to remain stable throughout the next year.

*ENERGY:* We are highly dependent on energy in our manufacturing processes. Electricity is the predominant source of energy at each of our three operations and we also utilize natural gas as a source of energy at our U.S. and European operations. At our plant in Corpus Christi, the average price of electricity decreased approximately 12% and the average price of natural gas decreased 6% in 2016. At our plant in The Netherlands, the average price of electricity was flat and the average price of natural gas decreased 11%; and, at TMM, the average price for electricity remained flat in 2016.

### **Research and Development / Technical Services**

Our expenditures for research and development and technical services were approximately \$200,000 in 2016. We conduct our research and technical service primarily at our facilities in Corpus Christi and The Netherlands, and our efforts are principally focused on process technology, product development and technical service to our customers. There are no research and development costs borne directly by our customers.

## Marketing and Customers

### *Sales and Marketing Department Organization*

TOR's sales efforts are managed out of Corpus Christi, Texas, by our Executive Vice President. We have sales offices at our U.S., Asian and European operations. Area and product managers report to the Executive Vice President and assist with customer, agent and distributor relations.

### *Independent Distributors and Agents*

We utilize a network of both domestic and foreign independent distributors and agents. Within North America there are multiple agents serving us on either a regional or a product basis. In most other countries there is one stocking distributor who purchases directly from TOR and resells in their territory. In certain large countries there may be multiple distributors. Our use of domestic and foreign distributors and agents allows us to have the benefit of sales specialists with specific trade knowledge in each country.

### *Customers*

Our end-use customers include companies in the paints, coatings and plastics, as well as other, industries. For the year ended December 31, 2016 and 2015, one of our customers represented 24% and 18%, respectively, of our total consolidated sales.

### *Geographic Distribution*

We sell our products globally and market them in North, Central and South America, Asia and Europe to customers located in more than 60 countries. For the years ended December 31, 2016 and 2015, Germany represented 22% and 23%, respectively, of our foreign sales and Italy represented 10% of our 2016 foreign sales. Sales to external customers are attributed to geographic area based on the country of distribution.

A summary of the Company's sales by geographic area is presented below:

(In thousands)	2016		2015	
	Sales Revenue	% of Total Sales	Sales Revenue	% of Total Sales
<b>Summary by Geographic Area</b>				
United States	\$ 23,836	62%	\$ 21,798	58%

Edgar Filing: TOR MINERALS INTERNATIONAL INC - Form 10-K

Canada, Mexico & South/Central America	2,608	7%	3,894	10%
Pacific Rim	2,417	6%	2,906	10%
Europe, Africa & Middle East	9,595	25%	8,461	22%
Total Sales	\$ 38,456	100%	\$ 37,059	100%

### ***Competition***

We experience competition with respect to each of our products. In order to maintain and grow sales volumes, we must rely on our ability to innovate, to add value, as well as to manufacture and distribute products at competitive prices. We believe that quality, delivery on schedule and price are the principal competitive factors. Due to the nature and the size of our company as compared to others in the industry, we are not price leaders, but are price followers. While we generally attempt to increase prices to offset cost increases, these actions tend to lag the cost increases.

Our competitors range from large corporations with a full line of production capabilities and products to small local firms specializing in one or two products. More recently we have faced competition from a large number of smaller Chinese suppliers. A number of these competitors are owned and operated by large diversified corporations. Many of these competitors, such as Kronos, Inc., the Chemours Company and J.M. Huber, have substantially greater financial and other resources, and their share of industry sales is substantially larger than ours.

### **Environmental Regulations and Product Safety**

Our plant in Corpus Christi is subject to regulations promulgated by the Federal Environmental Protection Agency ("EPA") and state and local authorities with respect to the discharge of substances into the environment. We believe that the Corpus Christi plant is in compliance with all applicable federal, state and local laws and regulations relating to the discharge of substances into the environment, and we do not expect that any material capital expenditures for environmental control facilities will be necessary in order to continue such compliance.

TMM's SR plant is required to be licensed by the Malaysian Atomic Energy Licensing Board ("AELB") as the ilmenite previously used by the plant's SR production is derived from tin tailings and may contain small amounts of monazite and hafnium, which are radioactive rare earth compounds. The monitoring is done in-house by TMM personnel and results are reported to the AELB as required. TMM is also currently in compliance with various other licensing and permitting requirements.

TPT operates an alumina processing plant in Hattem, The Netherlands, and is governed by rules promulgated by both The Netherlands and the European Community. We believe that the Hattem plant is in compliance with all applicable environmental and safety regulations.

### **Backlog**

We normally manufacture our pigment products in anticipation of, and not in response to, customer orders and generally fill orders within a short time after receipt. Consequently, we seek to maintain adequate inventories of our pigment products in order to permit us to fill orders promptly after receipt. As of March 9, 2017, we did not have a significant backlog of customer orders.

### **Seasonality**

Our business is closely correlated with the construction industry and its demand for materials that use pigments, such as paints and plastics. This has generally led to higher sales in our second and third quarters due to increases in construction and maintenance during warmer weather. Also, pigment consumption is closely correlated with general economic conditions. When the economy is in an expansionary state, there is typically an increase in pigment consumption, while a slowdown in the economy typically results in decreased pigment consumption. When the construction industry or the economy is in a period of decline, TOR's sales and profits are likely to be adversely affected.

### **Patents and Trademarks**



We currently hold no patents on the processes for manufacturing any of our products. Seven of TOR's products, HITOX (4/30/2025), ALUPREM (7/29/2023), HALTEX (7/28/2019), BARTEX (2/24/2027), TIOPREM (8/5/2018), OPTILOAD (10/27/2019), and BARYPREM (8/31/2026), are marketed under names which have been registered with the United States Patent and Trademark Office. Expiration dates are shown in parenthetical phrases following each product in the preceding sentence. Trademarks are also registered in certain foreign countries.

## **Employees**

As of December 31, 2016, our U.S. operations had 45 full-time employees, our European operation had 47 employees, and our Asian operation had 35 employees, of which 9 are covered by a collective bargaining agreement with an in-house union. We have not experienced any work stoppages and believe that our relations with all of our employees are good.

## **Available Information**

TOR's internet website address is [www.torminerals.com](http://www.torminerals.com). Our Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") are available through our internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. Our internet website and the information contained therein or connected thereto are not intended to be incorporated into this Annual Report on Form 10-K.

## Item 1 A. Risk Factors

In addition to the factors discussed in the “Forward-Looking Statement” at the beginning of this Annual Report on Form 10-K, the following are important factors that could cause actual results or events to differ materially from those contained in any forward-looking statements made by or on behalf of the Company. In addition, you should know that the risks and uncertainties described below are not the only risks and uncertainties that we face. Unforeseen risks could arise and problems or issues that we now view as minor could become more significant. If we were unable to adequately respond to any risks, our business, financial condition and results of operations could be materially adversely affected. Additionally, we cannot be certain or give any assurances that any actions taken to reduce known risks or uncertainties will be successful.

### Risks Related to Our Business

*We are a company with operations around the world and are exposed to general economic, political and regulatory conditions and risks in the countries in which we have operations and customers.*

We operate globally and have customers in many countries. Our production facilities are located in North America, Europe and Asia. Our principal customers are similarly global in scope and the prices of our most significant products are typically regional or world market prices. Consequently, our business and financial results are affected, directly and indirectly, by world economic conditions, including instability in credit markets, declining consumer and business confidence, fluctuating commodity prices and interest rates, volatile exchange rates and other challenges such as the changing regulatory environment.

Failure to comply with applicable laws, rules, regulations or court decisions could expose us to fines, penalties and other costs. Moreover, changes in laws or regulations, such as unexpected changes in regulatory requirements (including import or export licensing requirements), or changes in reporting requirements of the U.S., European Union ("EU") or Asian governmental agencies, could increase the cost of doing business in these regions. Any of these conditions may have an effect on our business and financial results as a whole and may result in volatile current and future prices for our securities, including our stock.

In addition, we have significant operations and financial relationships based in Europe. Sales originating in Europe accounted for approximately 24% of our consolidated sales revenue in 2016. Adverse conditions in the European economy may negatively impact our overall financial results due to reduced economic growth and resulting decreased end-use customer demand.

Finally, conditions such as the uncertainties associated with war, terrorist activities, civil unrest, epidemics, pandemics, weather, natural disasters, the effects of climate change or political instability in any of the countries in which we operate or have significant customers or suppliers could affect us by causing delays or losses in the supply or delivery of raw materials and products, as well as increasing security costs, insurance premiums and other expenses. These conditions could also result in or lengthen economic recession in the U.S., Europe, Asia or elsewhere.

***Our Malaysian debt is subject to subjective acceleration provisions and demand provisions that allow our lending institutions to accelerate payment at any time. If TMM's debt was accelerated under the demand provisions, our working capital and financial condition would be severely impacted.***

TMM has loan agreements with banks in Malaysia that provide short-term credit facilities and term loans. These borrowings are subject to certain subjective acceleration provisions based on the judgment of the banks and demand provisions that provide that the banks may demand repayment at any time. We believe such a demand provision is customary in Malaysia for such facilities. At December 31, 2016, our Malaysian debt consisted of \$206,000 under the short-term credit facilities and \$502,000 under the term loans.

If demand is made by the banks, we will require additional debt or equity financing to meet our working capital and operational requirements and to refinance our maturing or demanded indebtedness. Should we find it necessary to raise additional funds, we may find that such funds are either not available or are available only on terms that are unattractive in terms of shareholders' interest. If this debt could not be repaid or refinanced, the banks could foreclose and sell our foreign operations, which would adversely affect our financial condition and liquidity.

***Our business is affected by global economic factors including risks associated with declining economic conditions.***

Our financial results are substantially dependent upon overall economic conditions in the United States, the EU and Asia. Declining economic conditions or negative perceptions about economic conditions in any or all of these locations could result in a substantial decrease in demand for our products and could adversely affect our business.

Uncertain economic conditions and market instability make it difficult for us, our customers and our suppliers to forecast demand trends. Declines in demand would place additional pressure on our results of operations. The timing and extent of any changes to currently prevailing market conditions is uncertain and supply and demand may be unbalanced at any time. Consequently, at present, we are unable to accurately predict future economic conditions or the effect of such conditions on our financial conditions or results of operations, and we can give no assurances as to the timing, extent or duration of the current or future economic cycles impacting our industry.

***We have undertaken cost-savings initiatives to improve our operating performance, but we may not be able to implement and/or administer these initiatives in the manner contemplated and these initiatives may not produce the desired results.***

We have undertaken cost-savings initiatives and may undertake additional cost-savings initiatives in the future. These initiatives involve, among other things, staff reductions. Although we expect these initiatives to help us achieve incremental cost savings and operational efficiencies, we may not be able to implement and/or administer these initiatives, including staff reductions, in the manner contemplated, which could cause the initiatives to fail to achieve the desired results. Additionally, the implementation of these initiatives may result in impairment charges, some of which could be material. Even if we do implement and administer these initiatives in the manner contemplated, they may not produce the desired results. Accordingly, the initiatives that we have implemented and those that we may implement in the future may not improve our operating performance and may not help us achieve cost savings. Failure to successfully implement and/or administer these initiatives could have an adverse effect on our financial performance.

***We strive to improve operating margins through sales growth, price increases, productivity gains, and improved purchasing techniques, but we may not achieve the desired improvements.***

We work to improve operating profit margins through activities such as growing sales to achieve increased economies of scale, increasing prices, improving manufacturing processes, and adopting purchasing techniques that lower costs or provide increased cost predictability to realize cost savings. However, these activities depend on a combination of improved product design and engineering, effective manufacturing process control initiatives, cost-effective redistribution of production, and other efforts that may not be as successful as anticipated. The success of sales growth

and price increases depends not only on our actions but also on the strength of customer demand and competitors' pricing responses, which are not fully predictable. Failure to successfully implement actions to improve operating margins could adversely affect our financial performance.

***Our businesses depend on a continuous stream of new products, and failure to introduce new products could affect our sales, profitability and liquidity.***

One way that we remain competitive is by developing and introducing new and improved products on an ongoing basis. Customers continually evaluate our products in comparison to those offered by our competitors. A failure to introduce new products at the right time that are price competitive and that provide the features and performance required by customers could adversely affect our sales, or could require us to compensate by lowering prices. In addition, when we invest in new product development, we face risks related to production delays, cost over-runs and unanticipated technical difficulties, which could impact sales, profitability and/or liquidity.

***Our strategy includes seeking opportunities in new growth markets, and failure to identify or successfully enter such markets could affect our ability to grow our revenues and earnings.***

Certain of our products are sold into mature markets and part of our strategy is to identify and enter into markets growing more rapidly. These growth opportunities may involve new geographies, new product lines, new technologies or new customers. We may not be successful capitalizing on such opportunities and our ability to increase our revenue and earnings could be impacted.

***The markets for our products are highly competitive and subject to intense price competition, which could adversely affect our sales and earnings performance.***

Our customers typically have multiple suppliers from which to choose. If we are unwilling or unable to provide products at competitive prices, and if other factors, such as product performance and value-added services, do not provide an offsetting competitive advantage, customers may reduce, discontinue, or decide not to purchase our products. If we could not secure alternate customers for lost business, our sales and earnings performance could be adversely affected.

***Our multi-jurisdictional tax structure may not provide favorable tax efficiencies.***

We conduct our business operations in the United States, Malaysia and The Netherlands and are subject to taxation in those jurisdictions. While we seek to minimize our worldwide effective tax rate, our corporate structure may not optimize tax efficiency opportunities. We develop our tax position based upon the anticipated nature and structure of our business and the tax laws, administrative practices and judicial decisions now in effect in the countries in which we have operations, which are subject to change or differing interpretations. In addition, our effective tax rate could be adversely affected by several other factors, including: increases in expenses that are not deductible for tax purposes, the tax effects of restructuring charges or purchase accounting for acquisitions, changes related to our ability to ultimately realize future benefits attributed to our deferred tax assets, including those related to other-than-temporary impairment, and a change in our decision to indefinitely reinvest foreign earnings. Further, we are subject to review and audit by both domestic and foreign tax authorities, which may result in adverse decisions. Increased tax expense could have a negative effect on our operating results and financial condition.

***We are exposed to risks associated with acts of God, terrorists and others, as well as fires, explosions, wars, riots, accidents, embargoes, natural disasters, strikes and other work stoppages, quarantines and other governmental actions, and other events or circumstances that are beyond our control.***

We are exposed to risks from various events that are beyond our control, which may have significant effects on our results of operations. While we attempt to mitigate these risks through appropriate loss prevention measures, insurance, contingency planning and other means, we may not be able to anticipate all risks or to reasonably or cost-effectively manage those risks that we do anticipate. As a result, our operations could be adversely affected by circumstances or events in ways that are significant and/or long lasting.

The risks and uncertainties identified above are not the only risks that we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial also may adversely affect us. If any known or unknown risks and uncertainties develop into actual events, these developments could have material adverse effects

on our financial position, results of operations, and cash flows.

***Costs of raw materials and energy have resulted, and may continue to result, in increased operating expenses and reduced results of operations.***

We purchase large amounts of raw materials and energy for our manufacturing operations. The cost of these raw materials and energy, in the aggregate, represent a substantial portion of our operating expenses. The costs of raw materials and energy generally follow price trends of, and vary with the market conditions, for crude oil and natural gas, which may be highly volatile and cyclical. Moreover, the fluctuation of the U.S. Dollar to other currencies adds to the volatility in raw material costs. There have been, and will likely continue to be, periods of time when we are unable to pass raw material and energy cost increases on to our customers quickly enough to avoid adverse impacts on our results of operations. Our results of operations have been in the past, and could be in the future, significantly affected by increases and volatility in these costs. Cost increases also may increase working capital needs, which could reduce our liquidity and cash flow. In addition, when raw material and energy costs increase rapidly and are passed along to customers as product price increases, the credit risks associated with certain customers can be compounded. To the extent we increase our product sales prices to reflect rising raw material and energy costs, demand for products may decrease as customers reduce their consumption and use substitute products, which may have an adverse impact on our results of operations.

***Climate change poses both regulatory and physical risks that could adversely impact our results of operations.***

In addition to the possible direct economic impact that climate change could have on us, climate change regulation could significantly increase our costs. Energy costs are a significant component of our overall costs, and climate change regulation may result in significant increases in the cost of energy.

***We are dependent on a limited number of customers and could experience significant revenue reductions if they use alternative sources.***

We derive a significant portion of our revenue each quarter from a limited number of customers. Our top 10 customers accounted for approximately 45% of our consolidated sales revenues in 2016. As a result, a decrease in sales volume of any one of our top 10 customers could have a material impact on our business, operating results, and financial condition. For the year ended December 31, 2016, one customer represented approximately 24% of our total consolidated sales and the loss of this customer could have a material impact on our business, operating results and financial condition.

***Foreign currency fluctuations could adversely impact our financial condition.***

We conduct a significant portion of our operations outside the United States. Consequently, fluctuations in currencies of other countries, especially the Euro, may materially affect our operating results. Because our consolidated financial statements are presented in U.S. Dollars, we must translate revenues, income and expenses, as well as assets and liabilities, into U.S. Dollars based on average exchange rates prevailing during the reporting period or the exchange rate at the end of that period. Therefore, increases or decreases in value of the U.S. Dollar against other major currencies will affect our net operating revenues, operating income and the cost of balance sheet items denominated in foreign currencies. Foreign exchange rates can also impact the competitiveness of products produced in certain jurisdictions and exported for sale into other jurisdictions. These changes may impact the value received for the sale of our goods versus those of our competitors.

In addition to currency translation risks, we incur a currency transaction risk whenever one of our operating subsidiaries enters into a purchase or sales transaction using a currency different from the operating subsidiary's functional currency. Given the volatility of exchange rates, particularly the strengthening of the U.S. Dollar against major currencies or the currencies of large developing countries, we may not be able to manage our currency transaction and translation risks effectively. Failure to effectively manage these risks could have an adverse impact on our financial position, results of operations and cash flows. (See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Other Matters – Foreign Operations – Impact of Exchange Rate").



***We are required to make estimates and assumptions that may differ from actual results.***

In preparing our consolidated financial statements in conformity with generally accepted accounting principles in the United States of America ("GAAP"), we are required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amount of revenues and expenses during the reporting period. Actual results may differ from previously estimated amounts under different conditions and assumptions.

***Our competitors are established companies that have greater experience than us in a number of crucial areas, including manufacturing and distribution.***

There is intense competition with respect to each of our products. In order to maintain sales volume, we must consistently deliver high quality products on schedule at competitive prices. Our competitors range from large corporations with full lines of production capabilities and products, such as Kronos, Inc., the Chemours Company and J. M. Huber, to small local firms specializing in one or two products and, more recently, we have faced competition from a large number of smaller Chinese suppliers. The established companies have significantly greater experience than us in manufacturing and distributing products and have considerably more resources and market share than we do. We may have difficulty competing with these companies.

***Production at our manufacturing facilities could be disrupted for a variety of reasons, which could prevent us from producing enough of our products to maintain our sales and satisfy our customers' demands.***

A disruption in production at one or more of our manufacturing facilities could have a material adverse effect on our business. Disruptions could occur for many reasons, including fire, natural disasters, weather, unplanned maintenance or other manufacturing problems, disease, strikes or other labor unrest, transportation interruption, government regulation, political unrest or terrorism. Alternative facilities with sufficient capacity or capabilities may not be available, may cost substantially more or may take a significant time to start production, each of which could negatively affect our business and financial performance. If one of our key manufacturing facilities is unable to produce our products for an extended period of time, our sales may be reduced by the shortfall caused by the disruption and we may not be able to meet our customers' needs, which could cause them to seek other suppliers.

***Our U.S. operation is located on the Gulf of Mexico coastline and could be adversely affected by hurricanes.***

We may be subject to work stoppages for hurricanes, particularly during the period ranging from June to November. If a hurricane is severe and our Corpus Christi plant incurs heavy damage and prolonged downtime, which may not be fully covered by insurance, our financial results would be adversely affected.

***The insurance coverage that we maintain may not fully cover all operational risks.***

We maintain property, business interruption and casualty insurance but such insurance may not cover all of the risks associated with the hazards of our business and is subject to limitations, including deductibles and maximum liabilities covered. We may incur losses beyond the limits, or outside the coverage, of our insurance policies, including liabilities for environmental remediation. In the future, the types of insurance we obtain and the level of coverage we maintain may be inadequate or we may be unable to continue to maintain our existing insurance coverage or obtain comparable insurance coverage at a reasonable cost.

***Our business is exposed to risks associated with the creditworthiness of our suppliers, customers and business partners and the industries in which our suppliers, customers and business partners participate are cyclical in nature, both of which may adversely affect our business and results of operations.***

Some of the industries in which our end-use customers participate, such as the automotive, electrical, construction and textile industries, are highly competitive, to a large extent driven by end-use applications, and may experience overcapacity, all of which may affect demand for and pricing of our products. Our business is exposed to risks

associated with the creditworthiness of our key suppliers, customers and business partners and reductions in demand for our customers' products. These risks include the interruption of production at the facilities of our customers, the reduction, delay or cancellation of customer orders, delays in or the inability of customers to obtain financing to purchase our products, delays in or interruptions of the supply of raw materials we purchase and bankruptcy of customers, suppliers or other creditors. In addition, many of these industries are cyclical in nature, thus posing risks to us that vary throughout the year. The occurrence of any of these events may adversely affect our cash flow, profitability and financial condition.

*Our business and financial results may be adversely affected by various legal and regulatory proceedings.*

We are subject to legal and regulatory proceedings, lawsuits and claims in the normal course of business and could become subject to additional claims in the future, some of which could be material. The outcome of existing proceedings, lawsuits and claims may differ from our expectations because the outcomes of litigation are often difficult to reliably predict. As a result, future adverse rulings, settlements, or unfavorable developments could result in charges that could have a material adverse effect on our business, results of operations or financial condition in any particular period.

***The Company is subject to cyber security risks and may incur increasing costs in an effort to minimize those risks and to respond to cyber incidents.***

The Company's business involves the storage and transmission of the Company's and its customers' and suppliers' proprietary information, and security breaches could expose it to a risk of loss or misuse of this information, litigation and potential liability. A number of companies have disclosed security breaches, some of which have involved intentional attacks. The Company may not have the resources or technical sophistication to anticipate or prevent rapidly evolving types of cyber attacks. Attacks may be targeted at the Company, its customers, or both. If an actual or perceived breach of security occurs, customer and/or supplier perception of the effectiveness of the Company's security measures could be harmed and could result in the loss of customers, suppliers or both. Actual or anticipated attacks and risks may cause the Company to incur increasing costs, including costs to deploy additional personnel and protection technologies, train employees, and engage third party experts and consultants.

A person who is able to circumvent the Company's security measures could misappropriate the Company's or its customers' and suppliers' proprietary information, cause interruption in its operations, damage its computers or those of its users, or otherwise damage its reputation and business. Any compromise of security could result in a violation of applicable privacy and other laws, significant legal and financial exposure, damage to the Company's reputation, and/or a loss of confidence in its security measures, which could harm its business.

The Company's servers are also vulnerable to computer viruses, physical or electronic break-ins, and similar disruptions, including "denial-of-service" type attacks. The Company may need to expend significant resources to protect against security breaches or to address problems caused by breaches. Security breaches, including any breach by the Company or by persons with whom it has commercial relationships that result in the unauthorized release of its users' personal information, could damage its reputation and expose it to a risk of loss or litigation and possible liability.

#### **Item 1 B. Unresolved Staff Comments**

As of the date of this Report, we do not have any unresolved staff comments.

#### **Item 2. Properties**

We believe that all of the facilities and equipment of the Company are adequately insured, in generally good condition, well maintained, and generally suitable and adequate to carry on our business.

### *United States Operations*

We operate a plant in Corpus Christi, Texas, that manufactures HITOX, BARTEX, HALTEX, OPTILOAD and TIOPREM. During 2016, the Corpus Christi plant operated at approximately 67% of capacity. The facility is located in the Rincon Industrial Park on approximately 15 acres of land, 13 acres leased from the Port and approximately two acres of which we own. The lease payment is subject to "equalization valuation" every five years. The equalization valuation is used as a means of equalizing rentals on various Port lands and is determined solely at the discretion of the Port. The last equalization valuation was July 2012 at which time the annual lease increased from approximately \$54,000 to \$95,000. We executed an amended lease agreement with the Port on July 11, 2000, which extended the expiration date of the lease to June 30, 2027.

We own the improvements on the plant site, including a 3,400 square-foot office, a 5,000 square-foot laboratory building, a maintenance shop and several manufacturing and warehousing buildings containing a total of approximately 90,000 square feet of space. The leased premises includes approximately 350 lineal feet of bulk-headed industrial canal frontage, which provides access to the Gulf of Mexico inter-coastal waterway system through the Corpus Christi ship channel. This property is also serviced by a Company owned railroad spur that runs through our property to the canal.

### ***European Operations***

Our European Operation, TPT, is located in Hattem, The Netherlands, near the major shipping port of Rotterdam. TPT operated at approximately 77% of capacity in 2016. In 2016, TPT completed the first phase of an expansion project to increase capacity and diversify its production capabilities. The factory site, which the Company owns, consists of a 20,000 square foot steel frame metal building, a 2,000 square foot office building, and a 10,000 square foot warehouse with a loading dock.

The Netherlands plant and improvements are encumbered by a mortgage held by Rabobank. (See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations – Liquidity – European Operations”).

### ***Asian Operations***

Our Asian Operation, TMM, manufactures HITOX and TIOPREM in our plant in Ipoh, Malaysia, and is close in proximity to the Port of Lumut. The plant site has 38 acres of land that TMM has a right to use through 2074. The TMM plant operated at approximately 67% of capacity in 2016.

TMM owns the improvements on the plant site, including a 3,960 square-foot office, a 1,980 square-foot laboratory, a spare parts storage warehouse, an employee cafeteria, and several manufacturing and warehousing buildings containing a total of approximately 106,500 square feet of space.

The Malaysian plant and improvements are encumbered by liens held by HSBC Bank Malaysia Berhad (“HSBC”) and RHB Bank Berhad (“RHB”). (See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity – Asian Operations”).

### **Item 3. Legal Proceedings**

As of the date of this Report, we are involved in a legal proceeding which is ordinary and routine litigation to our business.

**Item 4. Mine Safety  
Disclosures**

Not applicable.

- 15 -

---

## PART II

### Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

#### Market for Common Equity

Our Common Stock trades on the NASDAQ Capital Market under the symbol “TORM”. The table below sets forth the high and low sales prices for our Common Stock for the periods indicated, according to NASDAQ. On February 28, 2017, the closing trading price of our Common Stock was \$6.90 and 5,959 shares were traded.

Quarter Ended		Mar 31	Jun 30	Sep 30	Dec 31
2016	High	\$ 4.510	\$ 4.800	\$ 6.140	\$ 6.200
	Low	3.410	3.475	4.350	5.100
2015	High	\$ 7.470	\$ 6.960	\$ 6.100	\$ 5.254
	Low	5.880	5.950	5.084	4.510

No cash dividends have ever been paid on our Common Stock. We currently intend to retain future earnings, if any, for use in our business, and therefore, we do not currently anticipate declaring or paying any dividends on our Common Stock in the foreseeable future.

The approximate number of shareholders of record of TOR’s Common Stock as of February 28, 2017 was 48.

#### Indemnification of Directors and Officers

The Company maintains a “Directors and Officers” insurance policy under which the directors and officers of the Company are indemnified against liability, which he/she may incur in his/her capacity as such.



**Issuer Purchases of Equity Securities**

The Company has no reportable purchases of equity securities.

**Item 6. Selected Financial  
Data**

As we are classified by the Securities and Exchange Commission as a smaller reporting company, Item 6, Selected Financial Data is not applicable.

- 16 -

---

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

**Company Overview:**

We are a global producer of high performance, specialty mineral products focused on product innovation and technical support. Our specialty mineral products, which include flame retardant and smoke suppressant fillers, engineered fillers, and TiO<sub>2</sub>-color hybrid pigments, are designed for use in plastics, coatings and paints applications, as well as a wide range of other industrial applications. With operations in the United States, Europe and Asia, our mission is to bring high value products and superior levels of service to our customers to help ensure their success.

Our U.S. operation, located in Corpus Christi, Texas, is also the global headquarters for the Company. The U.S. operation manufactures HITOX, BARTEX, HALTEX/OPTILOAD and TIOPREM. TPT, our European operation, located in Hattem, The Netherlands, manufactures Alumina based products and BARYPREM and our Asian operation, located in Ipoh, Malaysia, manufactures HITOX and TIOPREM. (See "Item 1. Business - Our Products").

Approximately 38% of our 2016 sales are outside of the United States. Of these sales, approximately 64% are in currencies other than the U.S. Dollar, primarily Euro based.

Operating expenses in the foreign locations are primarily in local currencies. Accordingly, we have exposure to fluctuation in foreign currency exchange rates. These fluctuations impact the translation of sales, earnings, assets and liabilities from local currency to the U.S. Dollar. (See "– Other Matters – Foreign Operations – Impact of Exchange Rate").

Our business is closely correlated with the construction industry and its demand for materials that use pigments, such as paints and plastics. This has generally led to higher sales in our second and third quarters due to increases in construction and maintenance during warmer weather. Also, pigment consumption is closely correlated with general economic conditions. When the economy is in an expansionary state, there is typically an increase in pigment consumption while a slowdown in the economy typically results in decreased pigment consumption. When the

construction industry or the economy is in a period of decline, TOR's sales and profits are likely to be adversely affected.

We manage our business in three geographical segments – United States, European and Asia (See Note 6 to our consolidated financial statements). The accounting policies of the segments are the same as those described in the Summary of Significant Policies (See Note 1 to our consolidated financial statements). Product sales of inventory between the U.S., European and Asian operations are based on inter-company pricing, which include an inter-company profit margin. The segment profit (loss), included in Note 6, from each location is reflective of these inter-company prices, as is inventory at the segment location prior to elimination adjustments. The elimination entries include an adjustment to the cost of sales resulting from the adjustment to ending inventory to eliminate inter-company profit, and the reversal of a similar adjustment from a prior period. To the extent there are net increases/declines period over period in segment inventories that include an inter-company component, the net effect of these adjustments can decrease/increase location profit.

Such presentation is consistent with the internal reporting reviewed by the Company's chief operating decision maker ("CODM"). Our CODM regularly reviews financial information about our segments in order to allocate resources and evaluate performance. Our CODM assesses segment performance based on segment sales and segment net income (loss) before depreciation and amortization, interest expense, income taxes, and other items which management does not believe reflect the underlying performance of the segment.

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

Below are our results for the years ended December 31, 2016 and 2015.

(In thousands)	Years Ended December 31,	
	2016	2015
<b>NET SALES</b>	<b>\$ 38,456</b>	<b>\$ 37,059</b>
Cost of sales	33,361	35,183
<b>GROSS MARGIN</b>	<b>5,095</b>	<b>1,876</b>
Technical services and research and development	199	178
Selling, general and administrative expenses	4,154	4,481
Loss on disposal of assets	2	-
Loss on impairment of assets	-	2,950
<b>OPERATING INCOME (LOSS)</b>	<b>740</b>	<b>(5,733)</b>
<b>OTHER INCOME (EXPENSE):</b>		
Interest expense, net	(177)	(208)
Loss on foreign currency exchange rate	(50)	(137)
Other income, net	38	24
Total Other Expense	(189)	(321)
<b>INCOME (LOSS) BEFORE INCOME TAX</b>	<b>551</b>	<b>(6,054)</b>
Income tax expense	107	310
<b>NET INCOME (LOSS)</b>	<b>\$ 444</b>	<b>\$ (6,364)</b>

**Management Outlook for the Future:**

We are a niche specialty mineral company. Our strategy is to continue to bring new, high-value added products to market while improving efficiencies and lowering our costs. We seek to manage risks of the cyclical industry in which we operate through our geographic and product diversification. Having operating segments on three continents gives us geographic diversification and affords us the flexibility of possibly offsetting weakness in one area of the world by increasing sales in other areas.

Going forward, our focus will continue to be on the development of new specialty mineral products that are capable of being marketed as premium products with enhanced performance characteristics, as compared to commodity

products. The high-value added characteristics of these products typically generate a higher margin than many commodity products.

In the past several years, we have become a leading provider of ultra-white and high-purity fire retardant fillers across Europe. In addition, we have introduced new specialty aluminas for applications outside of the plastics markets. We are currently working with several new and existing customers to develop new applications for our specialty hydrated alumina products. As a result, our 2016 ALUPREM sales in Europe increased 9%, of which 6% related to an increase in volume.

As is the case with many of our competitors, we faced strong headwinds in the  $\text{TiO}_2$  pigment market and experienced decreased volumes in our HITOX and TIOPREM products. We have experienced year-over-year negative pricing and volume comparisons. The decrease in sales volume reflects the continued weakness in the global  $\text{TiO}_2$  market, as well as aggressive pricing pressure from producers of white  $\text{TiO}_2$  in China. While there have been signs of the market gaining strength, we expect conditions in the  $\text{TiO}_2$  market to remain difficult for the next several years.

As a result, we made a strategic decision in 2015 to take a portion of TMM's SR production capacity out of service, and during 2015 we supplemented our existing SR inventory with SR produced by alternate sources. After careful evaluation throughout 2015, we determined that it was more cost effective to continue purchasing SR from alternate sources than to resume production at TMM. Therefore, during the fourth quarter of 2015, we incurred a loss of approximately \$2,950,000 associated with the remaining SR assets, which are included in the 2015 Consolidated Statement of Operations under "Loss on impairment of assets". This decision resulted in cost savings at TMM, as well as a reduction in our SR costs and a reduction in our inventory levels in 2016.

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

Despite the current TiO<sub>2</sub> market trends, we anticipate that the continued growth in our specialty mineral products will partially offset the difficult conditions we face in our HITOX and TIOPREM product lines.

Actual results could differ materially from those indicated by these forward looking statements because of various risks and uncertainties. See the information discussed under the caption Forward Looking Statements appearing below the Table of Contents of this Report.

## Results of Operations

The Company and its subsidiaries operate in three geographic segments. Product sales between the U.S., Asian and European operations are based on inter-company pricing which includes an inter-company profit margin. The inter-company sales are excluded from our consolidated sales and from the sales of each of our three geographic segments.

**Net Sales:** Consolidated net sales for 2016 increased 4% as compared with 2015, primarily due to an increase in volume of 9%, which was partially offset by a decrease in selling price of 5%.

Below is a summary of our consolidated products sales for 2016 and 2015 (in thousands):

Product	2016		2015		Variance	
ALUPREM	\$ 16,802	44%	\$ 13,319	36%	\$ 3,483	26%
HITOX	8,006	21%	10,392	28%	(2,386)	-23%
BARTEX / BARYPREM	8,217	21%	8,417	23%	(200)	-2%
HALTEX / OPTILOAD	4,364	11%	3,462	9%	902	26%
TIOPREM	742	2%	718	2%	24	3%
SR	-	0%	14	<1%	(14)	-100%
OTHER	325	1%	737	2%	(412)	-56%
Total	\$38,456	100%	\$37,059	100%	\$ 1,397	4%

**ALUPREM** sales increased 26% worldwide in 2016, primarily due to an increase in volume of 30%, which was partially offset by a decrease in selling price 4%. The increase in volume was experienced in both the U.S. and the European markets. The U.S. increase was primarily related to a change in order patterns of a large U.S. customer and the increase in European sales primarily related to the introduction of new specialty aluminas for new and existing customers..

**HITOX** sales decreased 23% in 2016, primarily due to a decrease in volume, selling price and the impact of fluctuation in the foreign currency of 13%, 9% and 1%, respectively. The decrease in sales volume of HITOX was primarily due to the continued weakness in the global  $\text{TiO}_2$  market, as well as aggressive pricing pressure from producers of white  $\text{TiO}_2$  in China. While there have been signs of the market gaining strength, we expect conditions in the  $\text{TiO}_2$  market to remain difficult for the next several years.

**BARTEX/BARYPREM** sales decreased approximately 2% in 2016, primarily due a reduction in volume of 4% for BARTEX, which is sold primarily in the U.S. market. The decrease in BARTEX was partially offset by an increase in volume of BARYPREM, which is sold in the European market.

**HALTEX/OPTILOAD** sales increased approximately 26% in 2016, primarily due to an increase in volume of 31%, which was partially offset by a shift in product mix of 5%. The increase in volume was primarily related to an increase in the customer base.

**TIOPREM** sales increased 3% in 2016, primarily due to an increase in volume of 33%, which was partially offset by a decrease in selling price of 30%.

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**SR** – There were no sales of SR to third parties during 2016 as compared to approximately \$14,000 in 2015. Historically, we have only sold SR to third parties during favorable market conditions and we have typically only produced SR for our own internal consumption. To reduce production costs and inventory levels, we made a strategic decision in 2015 to take our SR production capacity out of service. As a result, we are supplementing our existing SR inventory with product produced by alternate sources. By making this strategic move at the end of 2015, we recognized cost saving in 2016 as well as a reduction in our SR inventory level. We expect to continue to see cost savings as well as a reduction in our SR inventory levels over the next 12 months.

**Other Product** sales decreased 56%, primarily due to the sale of a by-product at TMM during 2015 which decreased as a result of the reduction in SR production in 2016, as well as a reduction in other product sales at the U.S. operation.

**United States Operations**

Below is a summary of net sales for our U.S. operation for 2016 and 2015 (in thousands). All inter-company sales have been eliminated.

Product	2016			2015			Variance		
ALUPREM	\$	9,393	35%	\$	6,536	26%	\$	2,857	44%
HITOX		4,935	19%		7,157	28%		(2,222)	-31%
BARTEX		6,985	26%		7,291	28%		(306)	-4%
HALTEX / OPTILOAD		4,364	16%		3,462	14%		902	26%
TIOPREM		676	3%		614	2%		62	10%
OTHER		325	1%		586	2%		(261)	-45%
Total	\$	26,678	100%	\$	25,646	100%	\$	1,032	4%

**ALUPREM** sales in the United States increased 44% in 2016, due to an increase in volume of 55%, which was partially offset by a decrease in selling price of 11%, primarily related to an increase in orders from a large U.S. customer.



**HITOX** sales in the United States decreased 31% during 2016, due to a decrease in volume and selling price of 22% and 9%, respectively. The decrease in sales volume of HITOX was primarily due to the continued weakness in the global TiO<sub>2</sub> market, as well as aggressive pricing pressure from producers of white TiO<sub>2</sub> in China. We expect conditions in the TiO<sub>2</sub> market to remain difficult for the next several years.

**BARTEX** sales in the United States decreased 4% in 2016, primarily due to a decrease in volume.

**HALTEX/OPTILOAD** sales in the United States increased 26% in 2016, primarily due to an increase in volume of 31% which was partially offset by a shift in product mix of 5%. The increase in volume was primarily related to an increase in the customer base.

**TIOPREM** sales in the United States increased 10% in 2016, primarily due to an increase in volume of 36%, which was partially offset by a decrease in selling price of 26%.

**Other Product** sales in the United States decreased 45% in 2016, primarily due to a decrease in volume and selling price of 40% and 5%, respectively.

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**European Operations**

TPT manufactures and sells ALUPREM to third party customers, as well as to our U.S. operations for distribution to our North American customers. TPT purchases HITOX from our Asian operation and TIOPREM from our U.S. operation for distribution in Europe. The following table represents TPT's sales (in thousands) for 2016 and 2015 to third party customers. All inter-company sales have been eliminated.

Product	2016		2015		Variance				
ALUPREM	\$	7,409	80%	\$	6,783	79%	\$	626	9%
BARYPREM		1,232	13%		1,126	13%		106	9%
HITOX		650	7%		672	8%		(22)	-3%
TIOPREM		22	<1%		38	<1%		(16)	-42%
Total	\$	9,313	100%	\$	8,619	100%	\$	694	8%

**ALUPREM** sales in Europe increased 9% in 2016, primarily due to an increase in volume and product mix of 6% and 3%, respectively. The increase in ALUPREM is primarily related to the introduction of new specialty aluminas for new and existing customers.

**BARYPREM** sales in Europe increased 9% in 2016, primarily due to an increase in volume related to new and existing customers.

**HITOX** sales in Europe decreased 3% in 2016, primarily related to a decrease in selling price of 12%, which was partially offset by an increase in volume 9%.

**TIOPREM** sales in Europe decreased 42% in 2016, primarily due to a decrease in selling price of 124%, which was partially offset by an increase in volume of 82%.



**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**Asian Operations**

TMM manufactures and sells HITOX and TIOPREM to third party customers, as well as to our U.S. and European operations. The following table represents TMM's sales (in thousands) for 2016 and 2015 to third party customers. All inter-company sales have been eliminated.

Product	2016			2015			Variance	
HITOX	\$	2,421	98%	\$	2,563	92%	\$	(142) -6%
TIOPREM		44	2%		66	2%		(22) -33%
SR		-	0%		14	<1%		(14) -100%
OTHER		-	0%		151	6%		(151) -100%
Total	\$	2,465	100%	\$	2,794	100%	\$	(329) -12%

**HITOX** sales in Asia decreased 6% in 2016, due to a decrease in selling price of 10% and the impact of fluctuation in foreign currency as the Malaysian Ringgit weakened against the U.S. Dollar by 6%, which were partially offset by an increase in volume of 10%. The decrease in selling price of HITOX was primarily due to aggressive pricing pressure from producers of white TiO<sub>2</sub> in China. While there have been signs of the market gaining strength, we expect conditions in the TiO<sub>2</sub> market in Asia to remain difficult for the next several years

**TIOPREM** sales in Asia decreased 33% in 2016 due to a decrease in volume and selling price of 26% and 2%, respectively, and the negative impact of fluctuation in the foreign currency of 5%.

**SR** – There were no sales of SR to third parties during 2016 as compared to approximately \$14,000 in 2015. Historically, we have only sold SR to third parties during favorable market conditions and we have typically only produced SR for our own internal consumption. In 2015, we made a strategic decision to take our SR production capacity out of service. We are currently supplementing our existing SR inventory with product produced by alternate sources. By making this strategic move, we expect to continue to see cost savings as well as a reduction in our SR inventory levels over the next 12 months.

**Other Product** sales in Asia decreased 100%, primarily due to the sale of a by-product at TMM during 2015 which decreased as a result of the reduction in SR production in 2016.

.

- 22 -

---

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**Gross Margin:** The following table represents our net sales, cost of sales and gross margin for the years ended December 31, 2016 and 2015.

(Dollars in thousands)	<b>Years Ended</b>	
	<b>December 31,</b>	
	<b>2016</b>	<b>2015</b>
NET SALES	\$38,456	\$37,059
Cost of sales	33,361	35,183
GROSS MARGIN	\$ 5,095	\$ 1,876
GROSS MARGIN %	13%	5%

Gross margin increased by 8% in 2016 primarily due to our decision to shut down our SR plant at the end of 2015, which increased gross margin by approximately 9%, of which approximately 6% related to the 2015 inventory impairment, approximately 2% related to a reduction in idle plant time and approximately 1% in lower indirect costs. A reduction in costs associate with improved efficiencies at TPT increased gross margin by approximately 4%. Partially offsetting the improvements in gross margin was a reduction in selling price which decreased gross margin by 5%.

**Selling, General and Administrative Expenses:** Selling, general and administrative expenses ("SG&A") decreased 7% in 2016 primarily due to collection on a customer account deemed uncollectable in 2015, which reduced 2016 SG&A by 12%. This decrease was partially offset by an increase sales expense of 3% and an increase in salaries and benefits of 2%.

**Interest Expense:** Interest expense decreased 15% in 2016 due to a reduction in the average short-term and long-term debt.

**Income Taxes:** We recorded an income tax expense of approximately \$107,000 in 2016. The 2016 income tax expense was primarily related to recognition of tax expense at TPT which was partially offset by income tax benefit in the U.S. and at TMM. The following table represents the components of our income tax expense (benefit):

<b>Components of Income Tax Expense (Benefit)</b>						
<b>Years Ended December 31,</b>						
(In thousands)	<b>Current</b>	<b>2016 Deferred</b>	<b>Total</b>	<b>Current</b>	<b>2015 Deferred</b>	<b>Total</b>
Federal	\$ -	\$ (140)	\$ (140)	\$ -	\$ (318)	\$ (318)
State	4	-	4	5	-	5
Foreign	247	(4)	243	(73)	696	623
Total Income Tax Expense (Benefit)	\$ 251	\$ (144)	\$ 107	\$ (68)	\$ 378	\$ 310

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**Liquidity, Capital Resources and Other Financial Information**

***Cash and Cash Equivalents***

As noted in the following table, cash and cash equivalents increased \$2,903,000 from December 31, 2015 to December 31, 2016. Operating activities provided \$4,832,000. We used cash of \$1,201,000 in investing activities and invested \$96,000 through non-cash investing activities. Financing activities used cash of \$561,000. The effect of the exchange rate fluctuations accounted for a decrease in cash of \$167,000.

(In thousands)	<b>Years Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Net cash provided by (used in)		
Operating activities	\$ 4,832	\$ 3,499
Investing activities	(1,201)	(5,644)
Financing activities	(561)	864
Effect of exchange rate fluctuations	(167)	(563)
Net increase (decrease) in cash and cash equivalents	\$ 2,903	\$ (1,844)
<i>Non-cash investing activities:</i>		
Capital expenditures financed through accounts payable and accrued expenses	\$ 96	\$ 355

***Operating Activities***

Below are the major changes in working capital affecting cash provided by operating activities during the year ended December 31, 2016.

Ø ***Trade Accounts Receivable:*** Trade accounts receivable provided cash of \$182,000 from the end of 2015 to the end of 2016. Accounts receivable decreased \$206,000 and \$59,000 at the U.S. operation and TMM, respectively, primarily due to a decrease in fourth quarter sales as compared to the same period of 2015. Accounts receivable at TPT increased \$83,000, primarily due to an increase in days outstanding.



Ø **Inventories:** Inventories provided cash of \$1,937,000 from the end of 2015 to the end of 2016 due to a reduction in inventory at the Company's U.S. and Asian operating segments. Inventories at the U.S. operation decreased \$491,000 and at TMM decreased \$1,945,000, primarily related to a reduction in raw materials which was partially offset by an increase in finished goods. Inventory at the European operation, TPT, increased \$499,000 primarily related to raw materials and finished goods. Over the next 12 month period, we plan to continue decreasing our inventory levels, primarily at TMM, to approximately a three to six month level of both finished goods and raw materials.

Ø **Other Current Assets:** Other current assets provided cash of \$114,000 during the year ended December 31, 2016, primarily related to refundable VAT tax paid on equipment at TPT which was partially offset by an increase related to the timing of insurance premiums.

Ø **Accounts Payable and Accrued Expenses:** Accounts payable and accrued expenses used cash of \$197,000 from the end of 2015 to the end of 2016. Accounts payable and accrued expenses at the U.S. operation and at TMM decreased \$128,000 and \$90,000, respectively, primarily related to the purchase of raw materials. At TPT, accounts payable and accrued expenses increased \$21,000, primarily related to the timing of purchases.

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

***Investing Activities***

We used cash of \$1,201,000 in investing activities during the year ended December 31, 2016 and \$5,644,000 during the year ended December 31, 2015. Net investments for each of our three segments are as follows:

Ø ***U.S. Operation:*** We invested approximately \$460,000 in 2016 for new production equipment designed to improve production yield and efficiency.

Ø ***European Operation:*** We invested \$736,000 at TPT during 2016 for new equipment to increase the production capacity and efficiency of ALUPREM.

Ø ***Asian Operation:*** We invested \$5,000 in 2016 at TMM primarily related to capital maintenance.

As noted in our “ – Critical Accounting Policies – Property, Plant and Equipment”, we expense routine maintenance and repair costs to operations as incurred and major improvements extending the asset lives are capitalized.

***Financing Activities***

We used cash of \$561,000 in financing activities during the year ended December 31, 2016. Financing activities provided \$864,000 during the year ended December 31, 2015. Significant factors relating to financing activities include the following:

Ø ***Lines of Credit***

Ø **U.S. Operation:** Borrowings on our U.S. line of credit were not utilized by the Company during 2016 or 2015.

Ø **European Operation:** Borrowings on TPT's line of credit were not utilized by the Company during the year ended December 31, 2016 and decreased \$530,000 for the year ended December 31, 2015.

Ø **Asian Operation:** Borrowings on TMM's line of credit decreased \$172,000 for the year ended December 31, 2016 and decreased \$241,000 for the year ended December 31, 2015.

Ø **Export Credit Refinancing ("ECR")** – TMM's borrowing on the ECR decreased \$855,000 for the year ended December 31, 2016. For the year ended December 31, 2015, TMM's borrowing on the ECR decreased \$974,000.

Ø **Long-term Debt**

Ø **U.S. Operation:** Our U.S. operation did not utilize long-term debt during the year ended December 31, 2016 and decreased \$486,000 for the year ended December 31, 2015.

Ø **European Operation:** TPT's long-term debt decreased \$643,000 for the year ended December 31, 2016 and increased \$3,599,000 for the year ended December 31, 2015.

Ø **Asian Operation:** TMM's long-term debt decreased \$288,000 for the year ended December 31, 2016 and decreased \$504,000 for the year ended December 31, 2015.

Ø **Issuance of Common Stock:** We received approximately \$1,397,000 from the issuance of 527,681 shares of common stock related to the exercise of detachable warrants, with an exercise price of \$2.65. The warrants were issued in May 2009 with our six percent (6%) convertible subordinated debentures and matured May 4, 2016.



**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**Liquidity**

**Long-term Debt – Financial Institutions**

A schedule of our long-term debt to financial institutions as of December 31, 2016 and 2015 is included in Note 2 to the consolidated financial statements on page F-12.

Our current maturities of long-term debt, as well as other current maturities, will be paid with current cash and cash generated from operations.

**United States Operations**

**U.S. Credit Agreement and Term Loan**

On December 31, 2010, the Company's U.S. operation entered into a credit agreement (the "Agreement") with American Bank, N.A. (the "Lender"). The Agreement consisted of a \$2 million term loan and a \$1 million line of credit, which was later increased to \$2 million. The term loan, which was scheduled to mature on January 1, 2016, was paid in full on November 4, 2015.

**European Operations**

On July 7, 2004, TPT entered into a mortgage loan (the "First Mortgage") with Rabobank. The First Mortgage, in the amount of €485,000 (\$510,000 at 12/31/2016), is to be repaid over 25 years and the interest rate is to be adjusted every five years. Under the terms of the First Mortgage, the interest was adjusted to a fixed rate of 3.85%, effective August 1, 2013, for a period of five years. Thereafter, the rate will change to Rabobank prime plus 1.75%. TPT utilized €325,000 (\$342,000 at 12/31/2016) of the loan to finance the July 14, 2004, purchase of land and an office building, as well as to remodel the office building. The balance of the loan proceeds, €160,000 (\$168,000 at 12/31/2016), was used for the expansion of TPT's existing building. Monthly principal and interest payments commenced on September 1, 2004, and will continue through July 1, 2029. The monthly principal payment is €1,616 (\$1,700 at 12/31/2016). The loan balance at December 31, 2016 was €196,000 (\$206,000 at 12/31/2016). The First Mortgage is secured by the land and office building purchased on July 7, 2004.

On January 3, 2005, TPT entered into a second mortgage loan (the “Second Mortgage”) with Rabobank to fund the acquisition of a 10,000 square foot warehouse with a loading dock that is located adjacent to TPT’s existing production facility. The Second Mortgage, in the amount of €470,000 (\$495,000 at 12/31/2016), is to be repaid over 25 years and the interest rate is to be adjusted every five years. Under the terms of the Second Mortgage, the interest was adjusted to a fixed rate of 3.3%, effective January 3, 2013, for a period of five years. Thereafter, the rate will change to Rabobank prime plus 1.75%. Monthly principal and interest payments commenced on February 28, 2005 and will continue through January 31, 2030. The monthly principal payment is €1,566 (\$1,648 at 12/31/2016). The Second Mortgage is secured by the land and building purchased by TPT on January 3, 2005. The loan balance at December 31, 2016 was €223,000 (\$234,000 at 12/31/2016).

On July 13, 2015, TPT entered into a third mortgage loan (the “Third Mortgage”) with Rabobank to fund the completion of its plant expansion. The Third Mortgage, in the amount of €1,000,000 (\$1,052,000 at 12/31/2016), will be repaid over 10 years and the interest rate, currently fixed at 3%, is to be adjusted every five years. Thereafter, the rate will change to Rabobank prime plus 1.75%. Monthly principal payments of €8,333 (\$8,769) commenced on January 31, 2016 and will continue through December 31, 2025. The Third Mortgage is secured by TPT’s real estate. The loan balance at December 31, 2016 was €900,000 (\$947,000 at 12/31/2016).

On July 13, 2015, TPT entered into a term loan (the “Term Loan”) with Rabobank to fund equipment purchases designed to improve production efficiencies and increase capacity at TPT. The Term Loan, in the amount of €2,350,000 (\$2,473,000 at 12/31/2016), will be amortized over a period of 5 years and is secured by TPT’s assets. The interest rate, set for a period of three months, is based on the relevant EURIBOR rate plus the bank margin of 2.3 percentage points per annum, which was 2.3% (bank margin which is floor) at December 31, 2016. The monthly principal payment of €39,167 (\$41,215 at 12/31/2016) commenced on January 31, 2016 and continues through December 31, 2020. The loan balance at December 31, 2016 was €1,880,000 (\$1,978,000 at 12/31/2016).

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**Asian Operations**

On March 2, 2012, TMM amended its banking facility (the "HSBC Facility") with HSBC Bank Malaysia Berhad ("HSBC"), a Malaysian Bank, to include a new term loan, funded in Malaysian Ringgits ("RM"), in the amount of RM 3,500,000 (\$780,000 at 12/31/2016) for the purpose of upgrading the operation's SR production process. Under the terms of the HSBC Facility, the loan was paid in 35 equal monthly installments of RM 97,223 (excluding interest) and a final installment of RM 97,195 (\$21,671 and \$21,664, respectively, at 12/31/2016), which commenced March 1, 2013 and continued through March 1, 2016. The loan balance of RM 292,000 (\$68,000 at 12/31/2015) was paid in full at maturity on March 31, 2016.

On October 25, 2013, TMM entered into an agreement (the "HSBC Facility Amendment") with HSBC to amend the HSBC Facility. Under the terms of the HSBC Facility Amendment, HSBC granted a new term loan to TMM in the amount of RM 5,000,000 (\$1,114,000 at 12/31/2016) which was used to finance a portion of the cost of plant improvements to increase efficiency and production capacity. Under the terms of the HSBC Facility Amendment, the term loan is amortized over a period of five (5) years, and the interest rate is 2.0% per annum above the HSBC's base lending rate. The interest rate at December 31, 2016 was 5.2% per annum. Monthly principal payments, in the amount of RM 83,333 (\$18,575 at 12/31/2016), commenced October 25, 2013 and will continue through October 25, 2018. The loan balance at December 31, 2016 was RM 2,250,000 (\$502,000 at 12/31/2016).

***Short term Debt***

**U.S. Operations**

On December 31, 2010, the Company entered into the Agreement with the Lender which established a \$1,000,000 line of credit (the "Line"), and on March 1, 2012, the Line was increased from \$1,000,000 to \$2,000,000. On May 15, 2013, the Company and the Lender entered into the Second Amendment to the Agreement which reduced the minimum interest rate floor from 5.5% to 4.5%. On May 15, 2015, the Company and the Lender entered into the Fifth Amendment to the Agreement which extended the Line from October 15, 2015 to October 15, 2016. On December 30, 2015, the Company and the Lender entered into the Sixth Amendment to the Agreement. Under the terms of the Sixth Amendment, the Company is required to maintain positive net earnings before taxes, interest, depreciation,

amortization and all other non-cash charges on a rolling four-quarter basis.

On June 23, 2016, the Company and the Lender amended and restated the credit agreement (the “Amended Agreement”). Under the terms of the Amended Agreement, the Lender extended the maturity date on the Line from October 15, 2016 to October 15, 2017. In addition, the Company requested that the Lender reduce the Line from \$2,000,000 to \$1,000,000. Under the terms of the Amended Agreement, the Company is required to maintain positive net earnings before taxes, interest, depreciation, amortization and all other non-cash charges on a rolling four-quarter basis. The Company was in compliance with all covenants at December 31, 2016.

Under the terms of the Amended Agreement, the amount the Company is entitled to borrow under the Line is subject to a borrowing base, which is based on the loan value of the collateral pledged to the Lender to secure the indebtedness owing to the Lender by the Company. Amounts advanced under the Line bear interest at a variable rate equal to one percent per annum above the Wall Street Journal Prime Rate as such prime rate changes from time to time, with a minimum floor rate of 4.5%. At December 31, 2016, no funds were outstanding on the Line.



**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**European Operations**

On July 13, 2015, TPT amended the short term banking facility (the "TPT Amended Agreement") with Rabobank. Under the terms of the TPT Amended Agreement, the TPT line of credit was reduced from €1,100,000 to €500,000 (\$1,158,000 to \$526,000 at December 31, 2016) and interest was changed from a variable interest rate of bank prime plus 2.8% to the average 1-month EURIBOR plus the bank margin of 3.3%. The interest rate was 2.9% at December 31, 2016. No funds were outstanding on the TPT line of credit at December 31, 2016. TPT was in compliance with all covenants at December 31, 2016.

**Asian Operations**

On August 24, 2015, TMM amended its short term banking facility with HSBC to extend the maturity date from June 30, 2015 to June 30, 2016. TMM is currently negotiating with HSBC to extend the maturity date of June 30, 2017. The HSBC facility includes the following in RM: (1) overdraft of RM 500,000 (\$111,000 at 12/31/2016); (2) an import/export line ("ECR") of RM 10,460,000 (\$2,331,000 at 12/31/2016); and (3) a foreign exchange contract limit of RM 5,000,000 (\$1,114,000 at 12/31/2016).

On February 21, 2017, TMM amended its short term banking facility with RHB Bank Berhad ("RHB") to extend the maturity date from August 10, 2016 to August 11, 2017. The RHB facility includes the following: (1) a multi-trade line of RM 3,500,000 (\$785,000 at 2/21/2017); (2) a bank guarantee of RM 1,200,000 (\$269,000 at 2/21/2017); and (3) a foreign exchange contract line of RM 2,500,000 (\$561,000 at 2/21/2017).

At December 31, 2016, TMM had a balance outstanding under the credit facility for the ECR of RM 924,000 (\$206,000 at 12/31/2016). The interest rate was 5.02% at December 31, 2016. TMM was in compliance with all covenants at December 31, 2016.

The banking facilities with both HSBC and RHB bear an interest rate on the respective overdraft facilities at 1.25% over bank prime, and the respective ECR facilities bear interest at 1.0% above the funding rate stipulated by the Export-Import Bank of Malaysia Berhad. The ECR facilities, which are a government supported financing arrangement specifically for exporters, are used by TMM for short-term financing of up to 180 days against customers' and inter-company shipments.

The borrowings under both the HSBC and the RHB short term credit facilities are subject to certain subjective acceleration covenants based on the judgment of the banks and a demand provision that provides that the banks may demand repayment at any time. A demand provision is customary in Malaysia for such facilities. The loan agreements are secured by TMM's property, plant and equipment. However, if demand is made by HSBC or RHB, we may be unable to refinance the demanded indebtedness, in which case, the lenders could foreclose on the assets of TMM. While repatriation is allowed in the form of dividends, the credit facilities prohibit TMM from paying dividends, and the HSBC facility further prohibits loans to related parties without the prior consent of HSBC.

### **Critical Accounting Policies**

**Significant Estimates** – TOR's discussion and analysis of its financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to bad debt, inventories, investments, intangible assets, income taxes, financing operations contingencies and litigation. TOR bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

**Revenue Recognition** – The Company recognizes revenue when each of the following four criteria are met: 1) a contract or sales arrangement exists; 2) title and risk of loss transfers to the customer upon shipment for Free-on-Board ("FOB") shipping point sales or when the Company receives confirmation of receipt and acceptance by the customer for FOB destination sales; 3) the price of the products is fixed or determinable; and 4) collectability is reasonably assured. The Company does not offer any type of discount or allowance to our customers.

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**Depreciation** – All property, plant and equipment is depreciated using the straight-line method over the estimated useful lives of depreciable assets which range from 3 to 39 years. Maintenance and repair costs are charged to operations as incurred and major improvements extending asset lives are capitalized.

**Bad Debts** – We perform ongoing credit evaluations of our customers' financial condition and, generally, require no collateral from our customers. The allowance for doubtful accounts is based upon the expected collectability of all accounts receivable including review of aging and current economic conditions. At December 31, 2016 and 2015, we maintained a reserve for doubtful accounts of approximately \$102,000 and \$366,000, respectively. Accounts are written off when all reasonable internal and external collection efforts have been performed. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

**Income Taxes** – Our effective tax rate is based on our level of pre-tax income, statutory rates and tax planning strategies. Significant management judgment is required in determining the effective rate and in evaluating our tax position. At December 31, 2016, our U.S. operation had federal NOL carry-forwards of approximately \$930,000 which resulted in a deferred tax asset ("DTA") of approximately \$316,000 which will begin to expire in 2033. We have determined that it is not necessary to provide a valuation allowance for our U.S. NOL as we believe the DTA is fully recoverable.

At December 31, 2016, our Asian operation, TMM, had NOL carry-forwards of approximately \$3,159,000 and certain other deferred tax assets of approximately \$3,128,000 which resulted in a DTA of approximately \$1,509,000. Due to the uncertainties regarding TMM's ability to utilize these DTAs, the Company established a valuation allowance to fully reserve against these DTAs.

**Inventory** – We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. Based on our 2016 inventory analysis, no such write down was required. However, due to the weakness in the TiO<sub>2</sub> market in 2015, the Company experienced a write down of approximately \$1,749,000 in inventory, primarily related to HITOX, SR and ilmenite, from cost to estimated market value for the year ended December 31, 2015. In addition, we recorded a reserve for obsolescence and unmarketable inventory of approximately \$826,000 at December 31, 2015. Based on our 2016 inventory analysis, no such write down was required.

Overhead is charged to inventory based on normal capacity and we expense abnormal amounts of idle facility expense, freight and handling costs in the period incurred. For the year ended December 31, 2015, the Company recorded approximately \$642,000 related to idle facility expense primarily at the Malaysian operations which is included in the 2015 Consolidated Statement of Operations as a component of “Cost of sales”. During 2016, TMM incurred \$5,000 related to idle facility expense.

***Property, Plant and Equipment*** – Property, plant and equipment are stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of depreciable assets which range from 3 to 39 years. Maintenance and repair costs are charged to operations as incurred and major improvements extending asset lives are capitalized.

***Impairment of Long-Lived Assets*** – The impairment of tangible and intangible assets is assessed when changes in circumstances (such as, but not limited to, a decrease in market value of an asset, current and historical operating losses or a change in business strategy) indicate that their carrying value may not be recoverable. This assessment is based on management’s estimates of future undiscounted cash flows, salvage values or net sales proceeds. These estimates take into account management’s expectations and judgments regarding future business and economic conditions, future market values and disposal costs. Actual results and events could differ significantly from management’s estimates. Based upon our most recent analysis, management determined no assets were impaired. However, for the year ended December 31, 2015, a loss on impairment of assets resulted in a write off of \$2,950,000 which is included in the consolidated statement of operations as “Loss on impairment of asset”. There can be no assurance that future impairment tests will not result in a charge to net earnings (loss).

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

**Share Based Compensation** – We calculate share based compensation using the Black-Scholes-Merton (“Black-Scholes”) option-pricing model, which requires the input of highly subjective assumptions, including the expected stock price volatility. For the years ended December 31, 2016 and 2015, we recorded \$170,000 and \$133,000, respectively, in share-based employee compensation. This compensation cost is included in the general and administrative expenses and cost of sales in the accompanying consolidated statements of operations.

***Impact of Newly Issued Accounting Pronouncements***

Refer to Note 1 to the Consolidated Financial Statements under Item 8 of this Annual Report on Form 10-K for a discussion of accounting standards that we recently adopted or will be required to adopt.

**Off-Balance Sheet Arrangements and Contractual Obligations**

**Operating Leases** – As of December 31, 2016, we lease 13 acres of the land at the facility located in Corpus Christi, Texas, from the Port and TMM has 38 acres of land which it has a commitment to use through 2074. The minimum future rental payments under this and other non-cancelable operating leases as of December 31, 2016 for the five years ending December 31 and in total thereafter are as follows:

**Years Ending December 31,**

(In thousands)

2017	\$ 114
2018	95
2019	95
2020	95
2021	95
Thereafter	527
Total minimum lease payments	\$ 1,021

**Contractual Obligations** – The following is a summary of all significant contractual obligations, both on and off our consolidated balance sheet, as of December 31, 2016, that will impact our liquidity.

(In thousands)		<b>Payments due by period</b>					
<b>Contractual Obligations</b>	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022 +</b>
Long-term Debt	\$3,867	\$1,142	\$ 640	\$ 640	\$ 640	\$ 145	\$ 660
Export Credit Refinancing	206	206	-	-	-	-	-
Interest Expense	349	120	67	51	35	24	52
Operating Leases	1,021	114	95	95	95	95	527
Capital Expenditures	820	820	-	-	-	-	-
<b>Total</b>	<b>\$6,263</b>	<b>\$2,402</b>	<b>\$ 802</b>	<b>\$ 786</b>	<b>\$ 770</b>	<b>\$ 264</b>	<b>\$ 1,237</b>

Variable interest rates used to calculate interest expense were 2.3% and 5.2% at December 31, 2016. Refer to Note 2 to the consolidated financial statements on page F-12.

We had approximately \$820,000 in contractual obligations primarily related to open purchase orders for capital expenditures at TPT.

**TOR Minerals International, Inc. and Subsidiaries**  
**Management's Discussion and Analysis of Financial Condition and Results of Operations**  
**December 31, 2016 and 2015**

Except as noted above, we did not have any contractual arrangements that have, or are likely to have, a material current or future effect on our consolidated financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

**Other Matters**

***Anticipated Capital Expenditures***

During 2017, we anticipate capital expenditures of approximately \$1,500,000 at TPT related to capital maintenance and expansion projects. As noted in our critical accounting policies related to property, plant and equipment, we expense routine maintenance and repair costs to operations as incurred and major improvements extending the asset lives are capitalized.

***Inflation***

General inflation has not had a significant impact on our business, and it is not expected to have a major impact in the foreseeable future. Increases in energy pricing adversely affect our results of operations and are expected to continue to do so.

***Foreign Operations – Impact of Exchange Rate***

We have two foreign operations, TMM in Malaysia and TPT in The Netherlands. TMM measures and records its transactions in terms of the local Malaysian currency, the Ringgit, which is also the functional currency. As a result, gains and losses resulting from translating TMM's financial statements from Ringgits to U.S. Dollars are recorded as cumulative translation adjustments (which are included in accumulated other comprehensive income, a separate component of shareholders' equity) on the consolidated balance sheet and statement of comprehensive income (loss). As of December 31, 2016, the cumulative translation adjustment related to the change in functional currency to the U.S. Dollar was a loss of \$1,732,000.

TPT's functional currency is the Euro. As a result, gains and losses resulting from translating TPT's financial statements from Euros to U.S. Dollars are recorded as cumulative translation adjustments on the consolidated balance sheet. As of December 31, 2016, the cumulative translation adjustment related to the change in functional currency to the U.S. Dollar was a loss of \$208,000.

***Foreign Currency Forward Contracts***

We manage the risk of changes in foreign currency exchange rates, primarily at our Malaysian operation, through the use of foreign currency contracts. Foreign exchange contracts are used to protect the Company from the risk that the eventual cash flows resulting from transactions in foreign currencies, including sales and purchases transacted in a currency other than the functional currency, will be adversely affected by changes in exchange rates. We report the fair value of the derivatives on our consolidated balance sheet and changes in the fair value are recognized in earnings in the period of the change.

At December 31, 2016, we had foreign currency contracts not designated as hedges. We marked these contracts to market, recording a net loss of approximately \$3,000 as a component of our 2016 net loss and \$2,000 as a current liability on the consolidated balance sheet at December 31, 2016.



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

Not applicable as we are a smaller reporting company.

**Item 8. Financial Statements and Supplementary Data**

The Consolidated Financial Statements are set out in this annual report on Form 10-K commencing on page F-1.

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

None.

**Item 9 A. Controls and Procedures**

**Evaluation of Disclosure Controls and Procedures**

Under the supervision and with the participation of the Company's Chief Executive Officer and Chief Financial Officer, management of the Company has evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act) as of the end of the period covered by the report ("Evaluation Date"). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the Evaluation Date, the Company's disclosure controls and procedures are effective (i) to ensure that information required to be disclosed by us in reports that the Company files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms; and (ii) to ensure that the information required to be disclosed in the reports that the Company files or submits under the Exchange Act is accumulated and communicated to our management, including the Company's Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures.

## Management's Annual Report on Internal Control over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. The Company's 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. The Company's internal control over financial reporting includes those policies and procedures that:

- 1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- 2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- 3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

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

Our management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on its assessment under that framework and the criteria established therein, our management concluded that the Company's internal control over financial reporting was effective as of December 31, 2016.

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

### **Changes in Internal Controls**

During the quarter ended December 31, 2016, there were no changes in the Company's internal controls over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) of the Exchange Act) that have materially affected or are reasonably likely to materially affect the Company's internal controls over financial reporting.

### **Item 9 B. Other Information**

The Company has previously disclosed all items required to be reported on a Form 8-K for the quarter ended December 31, 2016.

## **PART III**

### **Item 10. Directors, Executive Officers and Corporate Governance**

#### ***Directors, Executive Officers, Promoters and Control Persons***

Information which will be contained under the caption "Election of Directors" and "Principal Stockholders" in the Company's Definitive Proxy Statement for its 2017 Annual Meeting of Shareholders is incorporated by reference in response to this Item 10.

#### ***Section 16(a) Beneficial Ownership Reporting Compliance***

Information under the caption "Election of Directors – Section 16(a) Beneficial Ownership Reporting Compliance", which will be contained in the Company's Definitive Proxy Statement for its 2017 Annual Meeting of Shareholders, is incorporated herein by reference.

### ***Code of Ethics***

The Company has adopted a Code of Ethics that applies to all of its directors, officers (including its chief executive officer, chief financial officer, controller and any person performing similar functions) and employees. The Code of Ethics can be viewed on the Company's website at [www.torminerals.com](http://www.torminerals.com). The Company intends to post amendments to, or waivers from, its Code of Ethics that apply to its Chief Executive Officer, Chief Financial Officer, Controller and any other person performing similar functions, on its website.

The Company will provide to any person, without charge, upon written request, a copy of the Code of Ethics. Such requests should be sent to the Company's Corporate Secretary, Barbara Russell, at 722 Burleson Street, Corpus Christi, Texas 78402.

### ***Corporate Governance***

Information under the caption "Executive Compensation – Nomination of Directors", and "Election of Directors – Audit Committee", which will be contained in the Company's Definitive Proxy Statement for its 2017 Annual Meeting of Shareholders, is incorporated herein by reference.

**Item 11. Executive Compensation**

Information under the caption "Executive Compensation", which will be contained in the Company's Definitive Proxy Statement for its 2017 Annual Meeting of Shareholders, is incorporated herein by reference.

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

Information under the captions "Principal Stockholders" and "Executive Compensation – Security Ownership of Management", which will be contained in the Company's Definitive Proxy Statement for its 2017 Annual Meeting of Shareholders, is incorporated herein by reference.

**Equity Compensation Plan**

The following table provides information as of December 31, 2016, about our Common Stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans (including individual arrangements).

<b>Plan Category</b>	<b>Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)</b>	<b>Weighted-average exercise price of outstanding options, warrants and rights (b)</b>	<b>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)</b>
Equity compensation plans approved by security holders	153,164	\$10.84	232,205
Equity compensation plans not approved by security holders	--		--
<b>Total</b>	<b>153,164</b>	<b>\$10.84</b>	<b>232,205</b>

On February 21, 2000, the Company's Board of Directors approved the adoption of the 2000 Incentive Stock Option Plan (the "Plan") for TOR Minerals International, Inc. The Plan provides for the award of a variety of incentive compensation arrangements, including restricted stock awards, performance units or other non-option awards, to such employees and directors as may be determined by a Committee of the Board. At the Annual Shareholders' meeting on May 11, 2012, the maximum number of shares of the Company's common stock that may be sold or issued under the Plan was increased to 500,000 shares subject to certain adjustments upon recapitalization, stock splits and combinations, merger, stock dividend and similar events; in addition the Plan was extended to May 23, 2022. At December 31, 2016, there were 153,164 options outstanding, 114,631 exercised and 232,205 available for future issuance under the Plan.

For the years ended December 31, 2016 and 2015, the Company recorded \$170,000 and \$133,000, respectively, in stock-based compensation. This compensation cost is included in the general and administrative expenses and cost of sales in the accompanying consolidated statements of operations.

On April 21, 2016, the Board of Directors granted the officers of the Company non-qualifying stock options (the "Performance Awards"). The Performance Awards, which are subject to the terms, definitions and provisions of the 2000 Incentive Plan as amended, consist of the following grants:

<b>Officer's Name</b>	<b>Position</b>	<b>Five Year Performance Grant Award</b>
Olaf Karasch	President & Chief Executive Officer	150,000
Mark Schomp	Executive Vice President, Sales & Marketing	50,000
Barbara Russell	Treasurer & Chief Financial Officer	15,000

The Performance Awards, which vest over a five year period, are based solely on the basis of satisfaction of the performance criteria established annually by the Company's Board of Directors. The Performance Periods begin on January 1 of each calendar year and ending on December 31 of such year. The first Performance Period began on January 1, 2016 and ended on December 31, 2016. The final Performance Period shall begin on January 1, 2020 and shall end on December 31, 2020. The exercise price for the Performance Awards was set at the closing price of the Company's stock on January 4, 2016, as established by NASDAQ, at \$4.51 per share.

The 2016 Performance Awards consisted of 43,000 or one fifth of the five year total. Based on the satisfaction of the performance criteria established by the Company's Board of Directors for the year ended December 31, 2016, the actual number of Performance Awards vested was 13,975 or approximately 32.5% of the annual grant.

The Company granted options to purchase 19,975 shares of common stock during the year ended December 31, 2016. The weighted average fair value per option at the date of grant for options granted in the year ended December 31, 2016 was \$2.68 as valued using the Black-Scholes option-pricing model with the following weighted average assumptions:

	<b>Twelve Months Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Risk-free interest rate	1.90%	2.00%
Expected dividend yield	0.00%	0.00%
Expected volatility	0.59	0.66
Expected term (in years)	7.00	7.00

The risk free interest rate is based on the Treasury Constant Maturity Rate as quoted by the Federal Reserve at the time of the grant for a term equivalent to the expected term of the grant. The estimated volatility is based on the

historical volatility of our stock and other factors. The expected term of options represents the period of time the options are expected to be outstanding from grant date.

The number of shares of common stock underlying options exercisable at December 31, 2016 was 132,164 and the weighted-average remaining contractual life of those options is 5.12 years. Exercise prices on options outstanding at December 31, 2016, ranged from \$2.70 to \$19.99 per share as noted in the following table.

<b>Options Outstanding at December 31,</b>		
<b>2016</b>	<b>2015</b>	<b>Range of Exercise Prices</b>
39,164	19,189	\$ 2.70 - \$ 9.99
90,500	103,616	\$ 10.00 - \$ 14.99
23,500	23,500	\$ 15.00 - \$ 19.99
153,164	146,305	

As of December 31, 2016, there was approximately \$140,000 of compensation expense related to non-vested awards. This expense is expected to be recognized over a weighted average period of 1.2809 years.



As most options issued under the Plan are incentive stock options, the Company does not receive any excess tax benefits relating to the compensation expense recognized on vested options.

**Item 13. Certain Relationships, Related Transactions and Director Independence**

Information under the captions "Certain Transactions" and "Election of Directors – Directors' Attendance and Independence", which will be contained in the Company's Definitive Proxy Statement for its 2017 Annual Meeting of Shareholders, is incorporated herein by reference.

**Item 14. Principal Accountant Fees and Services**

Information under the caption "Principal Accountant Fees and Services", which will be contained in the Company's Definitive Proxy Statement for its 2017 Annual Meeting of Shareholders, is incorporated herein by reference.

- 36 -

---

## PART IV

### Item 15. Exhibits

(a)The following documents are being filed as part of this annual report on Form 10-K:

1.The Financial Statements are set out in this annual report on Form 10-K commencing on page F-1.

<u>Exhibit</u> <u>No.</u>	<u>Description</u>
3.1(1)(15)	Certificate of Incorporation of the Company as amended through February 28, 2010
3.2(1)(15)	By-laws of the Company, as amended through February 28, 2010
4.1(1)	Form of Common Stock Certificate
10.1(1)	Lease from Port of Corpus Christi Authority, dated April 14, 1987
10.2(1)	Lease from Port of Corpus Christi Authority, dated January 12, 1988, as amended on December 24, 1992
10.3(1) **	Summary Plan Description for the 1990 HITOX Profit Sharing Plan & Trust
10.4(2) **	Summary Plan Description for the 2000 Incentive Plan for TOR Minerals International, Inc.
10.5(3)	Amendment of Leases from Port of Corpus Christi Authority, dated July 11, 2000
10.6(4)	Form of Series A Convertible Preferred Stock Purchase Agreement, dated January 15, 2004
10.7(5)	Loan Agreement with HSBC Bank, dated November 23, 2004
10.8(5)	Loan Agreement with RHB Bank, dated November 23, 2004
10.9(5) **	Form of Incentive Stock Option Agreement for Officers A
10.10(5)	Form of Incentive Stock Option Agreement for Officers B
**	
10.11(5)	Form of Nonqualified Option Agreement for Directors
**	
10.12(6)	Loan Agreement with Rabobank, dated March 1, 2004
10.13(6)	Loan Agreement with Rabobank, dated July 6, 2004
10.14(7)	Capital Lease Agreement with De Lage Landen Financial Services, B.V., dated June 27, 2005
10.15(8)	Loan Agreement with Rabobank, dated July 19, 2005
10.16(9)	Amendment to Loan Agreement with HSBC Bank, dated September 14, 2005
10.17(10)	Amendment to Loan Agreement with HSBC Bank, dated December 22, 2005
10.18(10)	Amendment to Loan Agreement with RHB Bank, dated December 22, 2005
10.19(11)	Loan Agreement with Rabobank, dated March 20, 2007
10.20(12)	Service Agreement between Dr. Olaf Karasch and TOR Process and Trade, BV, (TPT) dated May 11, 2001
10.21(13)	Form of Subscription Agreement with respect to the Company's September – October 2008 Private Placement
10.22(13)	Form of Warrant with respect to the Company's September – October 2008 Private Placement
10.23(14)	Form of Subscription Agreement with respect to the Company's May – August 2009 issuance of 6% Convertible Subordinated Debentures
10.24(14)	Form of 6% Convertible Subordinated Debenture with respect to the Company's May – August 2009 issuance of 6% Convertible Subordinated Debentures
10.25(14)	Form of Warrant with respect to the Company's May – August 2009 issuance of 6% Convertible Subordinated Debentures
10.26(16)	Loan Agreement with American Bank, dated December 31, 2010

Edgar Filing: TOR MINERALS INTERNATIONAL INC - Form 10-K

- 10.27(17) Amendment to Loan Agreement with HSBC Bank, dated November 15, 2010
- 10.28(17) Amendment to Loan Agreement with HSBC Bank, dated June 27, 2011
- 10.27(17) Amendment to Loan Agreement with RHB Bank, dated June 1, 2011
- 10.30(17) Loan Agreement with Rabobank, dated June 28, 2011
- 10.31(18) Amendment to Loan Agreement with American Bank, dated March 1, 2012
- 10.32(18) Amendment to Loan Agreement with HSBC Bank, dated March 2, 2012

- 37 -

---

Exhibit No. Description

10.33(19)	Amendment to Loan Agreement with RHB Bank, dated April 17, 2013
10.34(20)	Amendment One to Revolving Credit Promissory Note with American Bank, dated May 15, 2013
10.35(20)	Amendment One to Promissory Note with American Bank, dated May 15, 2013
10.36(20)	Amendment Two to Loan Agreement with American Bank, dated May 15, 2013
10.37(20)	Amendment to Loan Agreement with HSBC Bank, dated May 21, 2013
10.38(21)	Agreement with American Bank, dated October 24, 2013
10.39(21)	Amendment to Loan Agreement with RHB Bank, dated October 25, 2013
10.40(21)	Amendment to Loan Agreement with HSBC Bank, dated October 25, 2013
10.41(22)	Amendment Three to Loan Agreement with American Bank, dated January 17, 2014
10.42(23)	Amendment to Loan Agreement with RHB Bank, dated April 17, 2014
10.43(24)	Amendment Four to Loan Agreement with American Bank, dated August 1, 2014
10.44(25)	Amendment to Loan Agreement with RHB Bank, dated August 15, 2014
10.45(25)	Amendment to Loan Agreement with HSBC Bank, dated August 31, 2014
10.46(26)	Amendment Five to Loan Agreement with American Bank, dated May 15, 2015
10.47(27)	Amendment to Loan Agreement with Rabobank, dated July 13, 2015
10.48(27)	Loan Agreement with Rabobank, dated July 13, 2015
10.49(28)	Amendment to Loan Agreement with HSBC Bank, dated August 24, 2015
10.50(29)	Amendment Six to Loan Agreement with American Bank, dated December 30, 2015
10.51(30)	Amended and Restated Loan Agreement with American Bank, dated June 23, 2016
10.52(30)	Allonge and Amendment No. Four to the Revolving Credit Promissory Note with American Bank, dated June 23, 2016
10.53(31)	Form of Non-qualifying Stock Option Agreement (Performance Award) for Officers, dated April 21, 2016
10.54(31)	Fourth Amendment to the 2000 Incentive Plan of TOR Minerals International, Inc., dated January 1, 2016
**	
10.54(32)	Amendment to Loan Agreement with RHB Bank, dated February 21, 2017
14.1	Code of Ethics (incorporated by reference to Exhibit 14.1 on Form 10-KSB filed on March, 24, 2006)
21	Subsidiaries of Registrant: TOR Minerals Malaysia Sdn Bhd and TOR Processing & Trade BV
23.1	Consent of BDO USA, LLP
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

- (1) Incorporated by reference to the exhibit filed with the Registrant's Registration Statement on Form S-1 (No. 33-25354) filed November 3, 1988, which registration statement became effective December 14, 1988.
- (2) Incorporated by reference to the exhibit filed with the Company's May 25, 2000 Form S-8
- (3) Incorporated by reference to the exhibit filed with the Company's December 31, 2000 Form 10-K
- (4) Incorporated by reference to the January 19, 2004 Form 8-K filed with the Commission on January 21, 2004
- (5) Incorporated by reference to the exhibit filed with the Company's December 31, 2004 Form 10KSB
- (6) Incorporated by reference to the exhibit filed with the Company's December 31, 2005 Form 10KSB
- (7) Incorporated by reference to the exhibit filed with the Company's June 27, 2005 Form 8-K
- (8) Incorporated by reference to the exhibit filed with the Company's July 19, 2005 Form 8-K
- (9) Incorporated by reference to the exhibit filed with the Company's September 14, 2005 Form 8-K
- (10) Incorporated by reference to the exhibit filed with the Company's December 22, 2005 Form 8-K
- (11) Incorporated by reference to the exhibit filed with the Company's March 20, 2007 Form 8-K
- (12) Incorporated by reference to the exhibit filed with the Company's December 31, 2006 Form 10-K
- (13) Incorporated by reference to the exhibit filed with the Company's September 15, 2008 Form 8-K
- (14) Incorporated by reference to the exhibit filed with the Company's May 6, 2009 and August 26, 2009 Form 8-K
- (15) Incorporated by reference to the exhibit filed with the Company's December 31, 2009 Form 10-K
- (16) Incorporated by reference to the exhibit filed with the Company's January 5, 2011 Form 8-K
- (17) Incorporated by reference to the exhibit filed with the Company's September 30, 2011 Form 10-Q
- (18) Incorporated by reference to the exhibit filed with the Company's December 31, 2011 Form 10-K
- (19) Incorporated by reference to the exhibit filed with the Company's March 31, 2013 Form 10-Q
- (20) Incorporated by reference to the exhibit filed with the Company's June 30, 2013 Form 10-Q
- (21) Incorporated by reference to the exhibit filed with the Company's September 30, 2013 Form 10-Q
- (22) Incorporated by reference to the exhibit filed with the Company's January 22, 2014 Form 8-K
- (23) Incorporated by reference to the exhibit filed with the Company's May 5, 2014 Form 10-Q
- (24) Incorporated by reference to the exhibit filed with the Company's August 1, 2014 Form 8-K
- (25) Incorporated by reference to the exhibit filed with the Company's November 5, 2014 Form 10-Q
- (26) Incorporated by reference to the exhibit filed with the Company's May 26, 2015 Form 8-K
- (27) Incorporated by reference to the exhibit filed with the Company's July 17, 2015 Form 8-K
- (28) Incorporated by reference to the exhibit filed with the Company's October 29, 2015 Form 10-Q
- (29) Incorporated by reference to the exhibit filed with the Company's January 4, 2016 Form 8-K
- (30) Incorporated by reference to the exhibit filed with the Company's June 23, 2016 Form 8-K
- (31) Incorporated by reference to the exhibit filed with the Company's April 22, 2016 Form 8-K
- (32) Incorporated by reference to the exhibit filed with the Company's February 23, 2017 Form 8-K

\*\*Constitutes a compensation plan or agreement under which executive officers may participate

## SIGNATURES

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

**TOR MINERALS INTERNATIONAL, INC.**  
**(Registrant)**

Date: March 9, 2017

By: **OLAF KARASCH**  
Olaf Karasch, President and CEO

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

<b><u>Signatures</u></b>	<b><u>Capacity with the Company</u></b>	<b><u>Date</u></b>
<b><u>OLAF KARASCH</u></b> (Olaf Karasch)	President and Chief Executive Officer (Principal Executive Officer)	March 9, 2017
<b><u>BARBARA RUSSELL</u></b> (Barbara Russell)	Treasurer and Chief Financial Officer (Principal Accounting Officer)	March 9, 2017
<b><u>DOUG HARTMAN</u></b> (Doug Hartman)	Chairman of the Board	March 9, 2017
<b><u>JULIE BUCKLEY</u></b> (Julie Buckley)	Director	March 9, 2017
<b><u>THOMAS W. PAUKEN</u></b> (Thomas W. Pauken)	Director	March 9, 2017
<b><u>BERNARD A. PAULSON</u></b> (Bernard A. Paulson)	Director	March 9, 2017
<b><u>STEVEN PAULSON</u></b> (Steven Paulson)	Director	March 9, 2017
<b><u>CHIN YONG TAN</u></b> (Chin Yong Tan)	Director	March 9, 2017

- 40 -

---



**TOR MINERALS INTERNATIONAL, INC. AND SUBSIDIARIES**  
Annual Report on Form 10-K

**Item 8. Financial Statements and Supplementary Data**

<b>TOR Minerals International, Inc.</b>	<b><u>Page</u></b>
<u>Report of Independent Registered Public Accounting Firm</u>	F – 2
<u>Consolidated Statements of Operations -</u> Years ended December 31, 2016 and 2015	F – 3
<u>Consolidated Statements of Comprehensive Loss -</u> Years ended December 31, 2016 and 2015	F – 4
<u>Consolidated Balance Sheets -</u> December 31, 2016 and 2015	F – 5
<u>Consolidated Statements of Shareholders' Equity -</u> Years ended December 31, 2016 and 2015	F – 6
<u>Consolidated Statements of Cash Flows -</u> Years ended December 31, 2016 and 2015	F – 7
<u>Notes to the Consolidated Financial Statements</u>	F – 8
<u>Schedule II – Valuation and Qualifying Accounts</u>	F – 30

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of

TOR Minerals International, Inc.

We have audited the accompanying consolidated balance sheets of TOR Minerals International, Inc. and Subsidiaries (collectively, the “Company”) as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive loss, shareholders’ equity and cash flows for each of the years then ended. In connection with our audits of the consolidated financial statements, we have also audited the financial statement schedule listed in the accompanying index. These financial statements and schedule are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements and schedule based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of TOR Minerals International, Inc. and Subsidiaries at December 31, 2016 and 2015, and the consolidated results of their operations and their cash flows for each of the years then ended in conformity with accounting principles generally accepted in the United States of America.

Also, in our opinion, the financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

/s/ BDO USA, LLP

Houston, Texas

March 9, 2017

F – 2

---

**Item 8. Financial Statements and Supplementary Data**

**TOR Minerals International, Inc. and Subsidiaries**  
**Consolidated Statements of Operations**  
(In thousands, except per share amounts)

	<b>Years Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
<b>NET SALES</b>	<b>\$ 38,456</b>	<b>\$ 37,059</b>
Cost of sales	33,361	35,183
<b>GROSS MARGIN</b>	<b>5,095</b>	<b>1,876</b>
Technical services and research and development	199	178
Selling, general and administrative expenses	4,154	4,481
Loss on disposal of assets	2	-
Loss on impairment of assets	-	2,950
<b>OPERATING INCOME (LOSS)</b>	<b>740</b>	<b>(5,733)</b>
<b>OTHER INCOME (EXPENSE):</b>		
Interest expense, net	(177)	(208)
Loss on foreign currency exchange rate	(50)	(137)
Other income, net	38	24
Total Other Expense	(189)	(321)
<b>INCOME (LOSS) BEFORE INCOME TAX</b>	<b>551</b>	<b>(6,054)</b>
Income tax expense	107	310
<b>NET INCOME (LOSS)</b>	<b>\$ 444</b>	<b>\$ (6,364)</b>
<i>Income (Loss) per common share:</i>		
Basic	\$ 0.13	\$ (2.11)
Diluted	\$ 0.13	\$ (2.11)
<i>Weighted average common shares outstanding:</i>		
Basic	3,376	3,014
Diluted	3,454	3,014

See accompanying notes to the consolidated financial statements.



**TOR Minerals International, Inc. and Subsidiaries**  
**Consolidated Statements of Comprehensive Loss**  
(In thousands)

	<b>Years Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
<b>NET INCOME (LOSS)</b>	\$ <b>444</b>	\$ <b>(6,364)</b>
<b>OTHER COMPREHENSIVE LOSS, net of tax</b>		
Currency translation adjustment, net of tax:		
Net foreign currency translation adjustment loss	(496)	(3,025)
Other comprehensive loss, net of tax	(496)	(3,025)
<b>COMPREHENSIVE LOSS</b>	\$ <b>(52)</b>	\$ <b>(9,389)</b>

See accompanying notes to the consolidated financial statements.

F – 4

---

**TOR Minerals International, Inc. and Subsidiaries**  
**Consolidated Balance Sheets**  
(In thousands, except per share amounts)

	December 31,	
	2016	2015
<b>ASSETS</b>		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 3,716	\$ 813
Trade accounts receivable, net	3,557	3,534
Inventories, net	11,776	13,988
Other current assets	742	878
Total current assets	19,791	19,213
PROPERTY, PLANT AND EQUIPMENT, net	15,907	17,472
DEFERRED TAX ASSET, foreign	27	19
OTHER ASSETS	4	4
<b>Total Assets</b>	<b>\$ 35,729</b>	<b>\$ 36,708</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
CURRENT LIABILITIES:		
Accounts payable	\$ 2,122	\$ 2,432
Accrued expenses	1,136	1,007
Notes payable under lines of credit	-	179
Export credit refinancing facility	206	1,108
Current maturities of long-term debt – financial institutions	1,142	1,485
Total current liabilities	4,606	6,211
LONG-TERM DEBT - FINANCIAL INSTITUTIONS	2,725	3,479
DEFERRED TAX LIABILITY, domestic	127	262
Total liabilities	7,458	9,952
COMMITMENTS AND CONTINGENCIES		
SHAREHOLDERS' EQUITY:		
Common stock \$1.25 par value: authorized, 6,000 shares; 3,542 shares issued and outstanding at December 31, 2016 and 3,014 at December 31, 2015	4,426	3,767
Additional paid-in capital	30,544	29,636
Accumulated deficit	(4,821)	(5,265)
Accumulated other comprehensive loss	(1,878)	(1,382)
Total shareholders' equity	28,271	26,756
<b>Total Liabilities and Shareholders' Equity</b>	<b>\$ 35,729</b>	<b>\$ 36,708</b>

See accompanying notes to the consolidated financial statements.





**TOR Minerals International, Inc. and Subsidiaries**  
**Consolidated Statements of Shareholders' Equity**  
**Years ended December 31, 2016 and 2015**  
(In thousands)

	<b>Common Stock Shares</b>	<b>Stock Amount</b>	<b>Additional Paid-In Capital</b>	<b>Retained Earnings (Accumulated Deficit)</b>	<b>Accumulated Other Comprehensive Income</b>	<b>Total</b>
<b>Balance at December 31, 2014</b>	<b>3,014</b>	<b>\$ 3,767</b>	<b>\$ 29,503</b>	<b>\$ 1,099</b>	<b>\$ 1,643</b>	<b>\$ 36,012</b>
Share based compensation			133			133
Net loss				(6,364)		(6,364)
Cumulative Translation Adjustment					(3,025)	(3,025)
<b>Balance at December 31, 2015</b>	<b>3,014</b>	<b>\$ 3,767</b>	<b>\$ 29,636</b>	<b>\$ (5,265)</b>	<b>\$ (1,382)</b>	<b>\$ 26,756</b>
Exercise of warrants	528	659	738			1,397
Share based compensation			170			170
Net income				444		444
Cumulative Translation Adjustment					(496)	(496)
<b>Balance at December 31, 2016</b>	<b>3,542</b>	<b>\$ 4,426</b>	<b>\$ 30,544</b>	<b>\$ (4,821)</b>	<b>\$ (1,878)</b>	<b>\$ 28,271</b>

See accompanying notes to the consolidated financial statements.



**TOR Minerals International, Inc. and Subsidiaries**  
**Consolidated Statements of Cash Flows**  
(In thousands)

	<b>Years Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
<b><i>CASH FLOWS FROM OPERATING ACTIVITIES:</i></b>		
Net Income (Loss)	\$ 444	\$ (6,364)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation	2,561	2,863
Inventory impairment	-	1,749
Loss on impairment of assets	-	2,950
Loss on disposal of assets	2	-
Share-based compensation	170	133
Deferred income tax (benefit) expense	(144)	378
(Recovery of) provision for bad debts	(237)	297
Changes in working capital:		
Trade accounts receivables	182	861
Inventories	1,937	2,246
Other current assets	114	(157)
Accounts payable and accrued expenses	(197)	(1,457)
Net cash provided by operating activities	4,832	3,499
<b><i>CASH FLOWS FROM INVESTING ACTIVITIES:</i></b>		
Additions to property, plant and equipment	(1,203)	(5,662)
Proceeds from sales of property, plant and equipment	2	18
Net cash used in investing activities	(1,201)	(5,644)
<b><i>CASH FLOWS FROM FINANCING ACTIVITIES:</i></b>		
Proceeds from lines of credit	82	6,578
Payments on lines of credit	(254)	(7,349)
Proceeds from export credit refinancing facility	1,705	4,220
Payments on export credit refinancing facility	(2,560)	(5,194)
Proceeds from long-term bank debt	-	3,641
Payments on long-term bank debt	(931)	(1,032)
Proceeds from the issuance of common stock through exercise of warrants	1,397	-
Net cash (used in) provided by financing activities	(561)	864
Effect of foreign currency exchange rate fluctuations on cash and cash equivalents	(167)	(563)
Net increase (decrease) in cash and cash equivalents	2,903	(1,844)
Cash and cash equivalents at beginning of year	813	2,657
Cash and cash equivalents at end of year	\$ 3,716	\$ 813
<b><i>Supplemental cash flow disclosures:</i></b>		
Interest paid	\$ 147	\$ 134

Income taxes paid	\$	95	\$	386
<i>Non-cash investing activities:</i>				
Capital expenditures financed through accounts payable and accrued expenses	\$	96	\$	355

See accompanying notes to the consolidated financial statements.

F – 7

---

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**1. Description of  
Business**

TOR Minerals International, Inc. and Subsidiaries (the "Company"), a Delaware Corporation, is engaged in a single industry, the manufacture and sale of mineral products for use as pigments and extenders, primarily in the manufacture of paints, industrial coatings plastics, and solid surface applications. The Company's global headquarters and U.S. manufacturing plant are located in Corpus Christi, Texas ("TOR U.S." or "U.S. Operation"). The Asian Operation, TOR Minerals Malaysia, Sdn. Bhd. ("TMM"), is located in Ipoh, Malaysia, and the European Operation, TOR Processing and Trade, BV ("TPT"), is located in Hattem, The Netherlands.

***Basis of Presentation and Use of Estimates:*** The consolidated financial statements include accounts of TOR Minerals International, Inc. and its wholly-owned subsidiaries, TMM and TPT. All significant intercompany transactions and balances are eliminated in the consolidation process.

In preparing consolidated financial statements in conformity with accounting principles generally accepted in the United States of America, we evaluate our estimates, including those related to bad debt, inventories, income taxes, financing operations, contingencies and litigation. TOR bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

***Cash and Cash Equivalents:*** The Company considers all highly liquid investments readily convertible to known cash amounts and with a maturity of twelve months or less at the date of purchase to be cash equivalents.

**Allowance for Doubtful Accounts:** The Company performs ongoing credit evaluations of its customers' financial condition and, generally, requires no collateral from its customers. The allowance for non-collection of accounts receivable is based upon the expected collectability of all accounts receivable including review of current aging schedules and current economic conditions and customer history. Accounts are written off when all reasonable internal and external collection efforts have been performed. At December 31, 2016 and 2015, we maintained a reserve for doubtful accounts of approximately \$102,000 and \$366,000, respectively.

**Foreign Currency:** Results of operations for the Company's foreign operations, TMM and TPT, are translated from the designated functional currency to the U.S. Dollar using average exchange rates during the period, while assets and liabilities are translated at the exchange rate in effect at the reporting date. Resulting gains or losses from translating foreign currency financial statements are reported as other comprehensive income (loss), net of income tax. The effect of changes in exchange rates between the designated functional currency and the currency in which a transaction is denominated are recorded as foreign currency transaction gains (losses) in earnings.

TMM measures and records its transactions in terms of the local Malaysian currency, the Ringgit ("RM"), which is also the functional currency. As a result, gains and losses resulting from translating the balance sheet from RM to U.S. Dollars are recorded as cumulative translation adjustments (which are included in accumulated other comprehensive income, a separate component of shareholders' equity) on the consolidated balance sheets. As of December 31, 2016, the cumulative translation adjustment included on the consolidated balance sheets was a loss of approximately 1,696,000.

TPT's functional currency is the Euro. As a result, gains and losses resulting from translating the balance sheet from Euros to U.S. Dollars are recorded as cumulative translation adjustments on the consolidated balance sheets. As of December 31, 2016, the cumulative translation adjustment included on the consolidated balance sheets was a loss of approximately \$182,000.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**Inventory:** We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the net realizable value based upon assumptions about future demand and market conditions. Based on our 2016 inventory analysis, no such write down was required. However, due to the weakness in the  $\text{TiO}_2$  market in 2015, the Company experienced a write down of approximately \$1,749,000 in inventory, primarily related to HITOX, SR and Ilmenite, from cost to estimated market value for the year ended December 31, 2015. In addition, we recorded a reserve for obsolescence and unmarketable inventory of approximately \$826,000 at December 31, 2015. Based on our 2016 inventory analysis, no such write down was required.

Overhead is charged to inventory based on normal capacity and we expense abnormal amounts of idle facility expense, freight and handling costs in the period incurred. For the year ended December 31, 2015, the Company recorded approximately \$642,000 related to idle facility expense primarily at the Malaysian operations which is included in the 2015 Consolidated Statement of Operations as a component of "Cost of sales". During 2016, TMM incurred \$5,000 related to idle facility expense.

**Property, Plant and Equipment:** Property, plant and equipment are stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of depreciable assets which range from 3 to 39 years. Maintenance and repair costs are charged to operations as incurred and major improvements extending asset lives are capitalized.

**Impairment of Long-Lived Assets:** The impairment of tangible and intangible assets is assessed when changes in circumstances (such as, but not limited to, a decrease in market value of an asset, current and historical operating losses or a change in business strategy) indicate that their carrying value may not be recoverable. This assessment is based on management's estimates of future undiscounted cash flows, salvage values or net sales proceeds. These estimates take into account management's expectations and judgments regarding future business and economic conditions, future market values and disposal costs. Actual results and events could differ significantly from management's estimates. Based upon our most recent analysis, management determined no assets were impaired. However, for the year ended December 31, 2015, a loss on disposal of assets resulted in a write off of approximately \$2,950,000 which is included in the consolidated statement of operations as "Loss on disposal/impairment of asset". There can be no assurance that future impairment tests will not result in a charge to net earnings (loss).



**Revenue Recognition:** The Company recognizes revenue when each of the following four criteria are met: 1) a contract or sales arrangement exists; 2) title and risk of loss transfers to the customer upon shipment for FOB shipping point sales or when the Company receives confirmation of receipt and acceptance by the customer for FOB destination sales; 3) the price of the products is fixed or determinable; and 4) collectability is reasonably assured. The Company does not offer any type of discount or allowance to our customers.

**Shipping and Handling:** The Company records shipping and handling costs, associated with the outbound freight on products shipped to customers, as a component of cost of goods sold.

**Earnings (Loss) Per Share:** Basic earnings (loss) per share are based on the weighted average number of shares outstanding and exclude any dilutive effects of options, warrants, debentures and/or convertible preferred stock. Diluted earnings per share reflect the effect of all dilutive items.

**Income Taxes:** The Company records income taxes using the liability method. Under this method, deferred income tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse.

When accounting for uncertainties in income taxes, we evaluate all tax years still subject to potential audit under the applicable state, federal and foreign income tax laws. We are subject to taxation in the United States, Malaysia and The Netherlands. Our federal income tax returns in the United States are subject to examination for the tax years ended December 31, 2013 through December 31, 2016. Our state tax return, which is filed in Texas, is subject to examination for the tax years ended December 31, 2012 through December 31, 2016. Our tax returns in various non-U.S. jurisdictions are subject to examination for various tax years dating back to December 31, 2011.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

As of January 1, 2016, we did not have any unrecognized tax benefits and there was no change during the year ended December 31, 2016. In addition, we did not recognize any interest and penalties in our consolidated financial statements during the years ended December 31, 2016 and 2015. If any interest or penalties related to any income tax liabilities are imposed in future reporting periods, we expect to record both of these items as components of income tax expense.

**Share Based Compensation:** The Company calculates share based compensation using the Black-Scholes-Merton ("Black-Scholes") option-pricing model, which requires the input of subjective assumptions including the expected stock price volatility. For the years ended December 31, 2016 and 2015, we recorded \$170,000 and \$133,000, respectively, in share-based employee compensation. This compensation cost is included in the general and administrative expenses in the accompanying consolidated statements of operations.

**Derivatives:** We manage the risk of changes in foreign currency exchange rates, primarily at our Malaysian operation, through the use of foreign currency contracts. Foreign exchange contracts are used to protect the Company from the risk that the eventual cash flows resulting from transactions in foreign currencies, including sales and purchases transacted in a currency other than the functional currency, will be adversely affected by changes in exchange rates. We report the fair value of the derivatives on our consolidated balance sheets and changes in the fair value are recognized in earnings in the period of the change. (See Note 12, *Derivatives and Other Financial Instruments*).

***Recently Adopted Accounting Standards***

In August 2014, the Financial Accounting Standards Board (the "FASB") issued ASU 2014-15, *Presentation of Financial Statements—Going Concern: Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, which requires the management of the Company to evaluate whether there is substantial doubt about the Company's ability to continue as a going concern. ASU 2014-15 is effective for annual periods ending after December 15, 2016. The adoption of this pronouncement did not have a material effect on our consolidated financial position, results of operations or cash flows.

In July 2015, the FASB issued ASU 2015-11, *Simplifying the Measurement of Inventory* ("ASU 2015-11"). ASU 2015-11 applies to inventory that is measured using the FIFO or average cost method and requires measurement of

that inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016. The adoption of this pronouncement did not have a material effect on our consolidated financial position, results of operations or cash flows.

In February 2015, the FASB issued ASU 2015-02, "Consolidation (Topic 810)", an update to their existing consolidation model, which changes the analysis a reporting entity must perform to determine whether it should consolidate certain types of legal entities. The new rules were effective for the Company in the first quarter of 2016. The adoption of the new accounting rules did not have a material impact on the Company's financial condition, results of operations or cash flows.

In April 2015, the FASB issued ASU 2015-03, "Interest - Imputation of Interest", which require debt issuance costs to be presented in the balance sheet as a direct deduction from the associated debt liability. The new rules were effective for the Company in the first quarter of 2016. The impact of adopting the new accounting guidance on classification of debt issuance costs on the Company's 2015 Consolidated Balance Sheet is a reduction in noncurrent assets and long-term debt of \$21,450. In August 2015, the FASB issued ASU 2015-15, "Interest - Imputation of Interest (Subtopic 835-30) - Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements". The guidance clarifies accounting for debt issuance costs related to line-of-credit arrangements. The standard states that the FASB deems deferring debt issuance costs related to line-of-credit arrangements as an asset and amortizing over the term of the agreement to be appropriate, which is consistent with the Company's existing accounting treatment for these costs.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

*New Accounting Standards*

In May 2014, the FASB issued ASU No. 2014-09, “Revenue from Contracts with Customers (Topic 606),” as amended by multiple standards updates. The pronouncement was issued to clarify the principles for recognizing revenue and to develop a common revenue standard and disclosure requirements for U.S. GAAP and IFRS. The pronouncement is effective for reporting periods beginning after December 15, 2017. We are in the initial stages of evaluating the effect of the standard on our financial statements and continue to evaluate the available transition methods. We will continue to evaluate the standard as well as additional changes, modifications or interpretations which may impact the Company.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), which supersedes all existing guidance on accounting for leases in ASC Topic 840. ASU 2016-02 is intended to provide enhanced transparency and comparability by requiring lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet. ASU 2016-02 will continue to classify leases as either finance or operating, with classification affecting the pattern of expense recognition in the statement of income. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. ASU 2016-02 is required to be applied with a modified retrospective approach to each prior reporting period presented with various optional practical expedients. We are currently in the initial stages of evaluating the potential impact of adopting ASU 2016-02 on our financial statements and related disclosures.

In March 2016, the FASB issued ASU 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. ASU 2016-09 changes how companies account for certain aspects of share-based payment awards to employees, including the accounting for income taxes, forfeitures and statutory tax withholding requirements, as well as classification in the statement of cash flows. ASU 2016-09 is effective for annual periods beginning after December 15, 2016, including interim periods within those annual periods. If an entity early adopts in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period and the entity must adopt all of the amendments from ASU 2016-09 in the same period. We have determined that the impact of this standard will not be material. We will adopt this standard in 2017.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which requires that entities use a new forward looking “expected loss” model that generally will result in the earlier recognition of allowance for credit losses. The measurement of expected credit losses is based upon historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. ASU No. 2016-13 is effective for fiscal years beginning after December 15,

2019, including interim periods within those fiscal years. We are currently assessing the potential impact that adoption of ASU No. 2016-13 will have in our consolidated financial statements.

In the second half of 2016, the FASB issued ASU Nos. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, and 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash. The objective of these updates is to reduce the diversity in practice in the classification of certain cash receipts and cash payments, and the presentation of restricted cash within an entity's statement of cash flows, respectively. These ASUs are effective for interim and annual fiscal periods beginning after December 15, 2017. Early adoption is permitted. The adoption of this guidance is not expected to have a material impact on the Company's consolidated financial statements.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**2. Debt and Notes Payable**

**Long-term Debt – Financial Institutions**

Below is a summary of our long-term debt to financial institutions as of December 31, 2016 and 2015:

(In thousands)	<b>December 31,</b>	
	<b>2016</b>	<b>2015</b>
Fixed rate Euro term note payable to a Netherlands bank, with an interest rate of 3.85% at December 31, 2016, due July 1, 2029, secured by TPT's land and buildings. (Euro balance at December 31, 2016, €196)	206	235
Fixed rate Euro term note payable to a Netherlands bank, with an interest rate of 3.3% at December 31, 2016, due January 31, 2030, secured by TPT's land and buildings. (Euro balance at December 31, 2016, €223)	234	264
Fixed rate Euro term note payable to a Netherlands bank, with an interest rate of 3.0% per annum, due December 31, 2025, is secured by TPT's land and buildings. (Euro balance at December 31, 2016, €900)	947	1,087
Variable rate Euro term note payable to a Netherlands bank, with a EURIBOR interest rate plus bank margin of 2.3% per annum, due December 31, 2020, is secured by substantially all of TPT's assets. The interest rate at December 31, 2016 was 2.3%. (Euro balance at December 31, 2016, €1,880)	1,978	2,554
Malaysian Ringgit term note payable to a Malaysian bank, with an interest rate of 2% above the bank base lending rate, due October 25, 2018, secured by TMM's property, plant and equipment. The interest rate at December 31, 2016 was 5.2%. (Ringgit balance at December 31, 2016, RM 2,250)	502	756
Malaysian Ringgit term note payable to a Malaysian bank, with an interest rate of 2% above the bank base lending rate, secured by TMM's property, plant and equipment. Paid in full at maturity, March 31, 2016.	-	68
Total	3,867	4,964
Less current maturities	1,142	1,485
Total long-term debt - financial institutions	\$ 2,725	\$ 3,479

F – 12

---

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**United States Operations**

**U.S. Credit Agreement and Term Loan**

On December 31, 2010, the Company's U.S. operation entered into a credit agreement (the "Agreement") with American Bank, N.A. (the "Lender"). The Agreement consisted of a \$2 million term loan and a \$1 million line of credit, which was later increased to \$2 million. The term loan, which was scheduled to mature on January 1, 2016, was paid in full on November 4, 2015.

**European Operations**

On July 7, 2004, TPT entered into a mortgage loan (the "First Mortgage") with Rabobank. The First Mortgage, in the amount of €485,000 (\$510,000 at 12/31/2016), is to be repaid over 25 years and the interest rate is to be adjusted every five years. Under the terms of the First Mortgage, the interest was adjusted to a fixed rate of 3.85%, effective August 1, 2013, for a period of five years. Thereafter, the rate will change to Rabobank prime plus 1.75%. TPT utilized €325,000 (\$342,000 at 12/31/2016) of the loan to finance the July 14, 2004, purchase of land and an office building, as well as to remodel the office building. The balance of the loan proceeds, €160,000 (\$168,000 at 12/31/2016), was used for the expansion of TPT's existing building. Monthly principal and interest payments commenced on September 1, 2004, and will continue through July 1, 2029. The monthly principal payment is €1,616 (\$1,700 at 12/31/2016). The loan balance at December 31, 2016 was €196,000 (\$206,000 at 12/31/2016). The First Mortgage is secured by the land and office building purchased on July 7, 2004.

On January 3, 2005, TPT entered into a second mortgage loan (the "Second Mortgage") with Rabobank to fund the acquisition of a 10,000 square foot warehouse with a loading dock that is located adjacent to TPT's existing production facility. The Second Mortgage, in the amount of €470,000 (\$495,000 at 12/31/2016), is to be repaid over 25 years and the interest rate is to be adjusted every five years. Under the terms of the Second Mortgage, the interest was adjusted to a fixed rate of 3.3%, effective January 3, 2013, for a period of five years. Thereafter, the rate will change to Rabobank prime plus 1.75%. Monthly principal and interest payments commenced on February 28, 2005 and will continue through January 31, 2030. The monthly principal payment is €1,566 (\$1,648 at 12/31/2016). The Second Mortgage is secured by the land and building purchased by TPT on January 3, 2005. The loan balance at December 31, 2016 was €223,000 (\$234,000 at 12/31/2016).

On July 13, 2015, TPT entered into a third mortgage loan (the "Third Mortgage") with Rabobank to fund the completion of its plant expansion. The Third Mortgage, in the amount of €1,000,000 (\$1,052,000 at 12/31/2016), will be repaid



over 10 years and the interest rate, currently fixed at 3%, is to be adjusted every five years. Thereafter, the rate will change to Rabobank prime plus 1.75%. Monthly principal payments of €8,333 (\$8,769) commenced on January 31, 2016 and will continue through December 31, 2025. The Third Mortgage is secured by TPT's real estate. The loan balance at December 31, 2016 was €900,000 (\$947,000 at 12/31/2016).

On July 13, 2015, TPT entered into a term loan (the "Term Loan") with Rabobank to fund equipment purchases designed to improve production efficiencies and increase capacity at TPT. The Term Loan, in the amount of €2,350,000 (\$2,473,000 at 12/31/2016), will be amortized over a period of 5 years and is secured by TPT's assets. The interest rate, set for a period of three months, is based on the relevant EURIBOR rate plus the bank margin of 2.3 percentage points per annum, which was 2.3% (bank margin which is floor) at December 31, 2016. The monthly principal payment of €39,167 (\$41,215 at 12/31/2016) commenced on January 31, 2016 and continues through December 31, 2020. The loan balance at December 31, 2016 was €1,880,000 (\$1,978,000 at 12/31/2016).

At December 31, 2016, TPT was in compliance with all covenants.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**Asian Operations**

On March 2, 2012, TMM amended its banking facility (the “HSBC Facility”) with HSBC Bank Malaysia Berhad (“HSBC”), a Malaysian Bank, to include a new term loan, funded in Malaysian Ringgits (“RM”), in the amount of RM 3,500,000 (\$780,000 at 12/31/2016) for the purpose of upgrading the operation’s SR production process. Under the terms of the HSBC Facility, the loan was paid in 35 equal monthly installments of RM 97,223 (excluding interest) and a final installment of RM 97,195 (\$21,671 and \$21,664, respectively, at 12/31/2016), which commenced March 1, 2013 and continued through March 1, 2016. The loan balance of RM 292,000 (\$68,000 at 12/31/2015) was paid in full at maturity on March 31, 2016.

On October 25, 2013, TMM entered into an agreement (the “HSBC Facility Amendment”) with HSBC to amend the HSBC Facility. Under the terms of the HSBC Facility Amendment, HSBC granted a new term loan to TMM in the amount of RM 5,000,000 (\$1,114,000 at 12/31/2016) which was used to finance a portion of the cost of plant improvements to increase efficiency and production capacity. Under the terms of the HSBC Facility Amendment, the term loan is amortized over a period of five (5) years, and the interest rate is 2.0% per annum above the HSBC’s base lending rate. The interest rate at December 31, 2016 was 5.2% per annum. Monthly principal payments, in the amount of RM 83,333 (\$18,575 at 12/31/2016), commenced October 25, 2013 and will continue through October 25, 2018. The loan balance at December 31, 2016 was RM 2,250,000 (\$502,000 at 12/31/2016).

At December 31, 2016, TMM was in compliance with all covenants.

***Short term Debt***

**U.S. Operations**

On December 31, 2010, the Company entered into the Agreement with the Lender which established a \$1,000,000 line of credit (the “Line”), and on March 1, 2012, the Line was increased from \$1,000,000 to \$2,000,000. On May 15, 2013, the Company and the Lender entered into the Second Amendment to the Agreement which reduced the minimum

interest rate floor from 5.5% to 4.5%. On May 15, 2015, the Company and the Lender entered into the Fifth Amendment to the Agreement which extended the Line from October 15, 2015 to October 15, 2016. On December 30, 2015, the Company and the Lender entered into the Sixth Amendment to the Agreement. Under the terms of the Sixth Amendment, the Company is required to maintain positive net earnings before taxes, interest, depreciation, amortization and all other non-cash charges on a rolling four-quarter basis.

On June 23, 2016, the Company and the Lender amended and restated the credit agreement (the “Amended Agreement”). Under the terms of the Amended Agreement, the Lender extended the maturity date on the Line from October 15, 2016 to October 15, 2017. In addition, the Company requested that the Lender reduce the Line from \$2,000,000 to \$1,000,000. Under the terms of the Amended Agreement, the Company is required to maintain positive net earnings before taxes, interest, depreciation, amortization and all other non-cash charges on a rolling four-quarter basis. The Company was in compliance with all covenants at December 31, 2016

Under the terms of the Amended Agreement, the amount the Company is entitled to borrow under the Line is subject to a borrowing base, which is based on the loan value of the collateral pledged to the Lender to secure the indebtedness owing to the Lender by the Company. Amounts advanced under the Line bear interest at a variable rate equal to one percent per annum above the Wall Street Journal Prime Rate as such prime rate changes from time to time, with a minimum floor rate of 4.5%. At December 31, 2016, no funds were outstanding on the Line.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**European Operations**

On July 13, 2015, TPT amended the short term banking facility (the “TPT Amended Agreement”) with Rabobank. Under the terms of the TPT Amended Agreement, the TPT line of credit was reduced from €1,100,000 to €500,000 (\$1,158,000 to \$526,000 at December 31, 2016) and interest was changed from a variable interest rate of bank prime plus 2.8% to the average 1-month EURIBOR plus the bank margin of 3.3%. The interest rate was 2.9% at December 31, 2016. No funds were outstanding on the TPT line of credit at December 31, 2016. TPT was in compliance with all covenants at December 31, 2016.

**Asian Operations**

On August 24, 2015, TMM amended its short term banking facility with HSBC to extend the maturity date from June 30, 2015 to June 30, 2016. TMM is currently negotiating with HSBC to extend the maturity date of June 30, 2017. The HSBC facility includes the following in RM: (1) overdraft of RM 500,000 (\$111,000 at 12/31/2016); (2) an import/export line (“ECR”) of RM 10,460,000 (\$2,331,000 at 12/31/2016); and (3) a foreign exchange contract limit of RM 5,000,000 (\$1,114,000 at 12/31/2016).

On February 21, 2017, TMM amended its short term banking facility with RHB Bank Berhad (“RHB”) to extend the maturity date from August 10, 2016 to August 11, 2017. The RHB facility includes the following: (1) a multi-trade line of RM 3,500,000 (\$785,000 at 2/21/2017); (2) a bank guarantee of RM 1,200,000 (\$269,000 at 2/21/2017); and (3) a foreign exchange contract line of RM 2,500,000 (\$561,000 at 2/21/2017).

At December 31, 2016, TMM had a balance outstanding under the credit facility for the ECR of RM 924,000 (\$206,000 at 12/31/2016) at a current interest rate of 5.02%. TMM was in compliance with all covenants at December 31, 2016.

The banking facilities with both HSBC and RHB bear an interest rate on the respective overdraft facilities at 1.25% over bank prime, and the respective ECR facilities bear interest at 1.0% above the funding rate stipulated by the Export-Import Bank of Malaysia Berhad. The ECR facilities, which are a government supported financing arrangement specifically for exporters, are used by TMM for short-term financing of up to 180 days against customers’ and inter-company shipments.

The borrowings under both the HSBC and the RHB short term credit facility are subject to certain subjective acceleration covenants based on the judgment of the banks and a demand provision that provides that the banks may demand repayment at any time. A demand provision is customary in Malaysia for such facilities. The loan agreements are secured by TMM's property, plant and equipment. However, if demand is made by HSBC or RHB, we may be unable to refinance the demanded indebtedness, in which case, the lenders could foreclose on the assets of TMM. While repatriation is allowed in the form of dividends, the credit facilities prohibit TMM from paying dividends, and the HSBC facility further prohibits loans to related parties without the prior consent of HSBC.

The following is a summary of the future maturities of long-term debt to financial institutions as of December 31, 2016:

**Years Ending December 31,**

(In thousands)

2017	1,142
2018	640
2019	640
2020	640
2021	145
Thereafter	660
Total	3,867

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**3. Fair Value Measurements**

The following table summarizes the valuation of our financial instruments recorded on a fair value basis as of December 31, 2016 and 2015. The Company did not hold any non-financial assets and/or non-financial liabilities subject to fair value measurements on a non-recurring basis at December 31, 2016 or 2015.

The fair value measurements consist of the following three levels:

**Level 1 inputs:** Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that are accessible at the measurement date (e. g., equity securities traded on the New York Stock Exchange).

**Level 2 inputs:** Level 2 inputs are other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly (e. g., quoted prices of similar assets or liabilities in active markets, or quoted prices for identical or similar assets or liabilities in markets that are not active).

**Level 3 inputs:** Level 3 inputs are unobservable inputs (e. g., a company's own data) for the asset or liability and should be used to measure fair value to the extent that relevant observable inputs are not available.

		Fair Value Measurements		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
(In Thousands)	Total			
<b>Current Liability</b>				
<b>December 31, 2015</b>				
Currency forward contracts	\$ 6	\$ -	\$ 6	\$ -
<b>December 31, 2016</b>				

Currency forward contracts	\$	2	\$	-	\$	2	\$	-
----------------------------	----	---	----	---	----	---	----	---

Our foreign currency derivative financial instruments mitigate foreign currency exchange risks and include forward contracts. The forward contracts are marked-to-market at each balance sheet date with any resulting gain or loss recognized in income as part of the gain or loss on foreign currency exchange rate included under “Other Expense” on the Company’s consolidated statement of operations. The fair value of the currency forward contracts is determined using Level 2 inputs based on the currency rate in effect at the end of the reporting period.

The fair value of the Company’s debt is based on estimates using standard pricing models and Level 2 inputs, including the Company’s estimated borrowing rate, that take into account the present value of future cash flows as of the consolidated balance sheet date. The computation of the fair value of these instruments is performed by the Company. The carrying amounts and estimated fair values of the Company’s long-term debt, including current maturities, are summarized below:

(In Thousands)	December 31, 2016		December 31, 2015	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Long-term debt, including current portion	\$ 3,867	\$ 3,785	\$ 4,964	\$ 4,438

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

The carrying amounts reported in the consolidated balance sheets for cash and cash equivalents, trade receivables, payables and accrued liabilities, accrued income taxes and short-term borrowings approximate fair values due to the short term nature of these instruments, accordingly, these items have been excluded from the above table.

**4. Inventories**

A summary of inventories follows:

(In thousands)	<b>December 31,</b>	
	<b>2016</b>	<b>2015</b>
Raw materials	\$ 5,235	\$ 6,310
Work in progress	1,636	4,168
Finished goods	4,587	3,552
Supplies	717	784
Total Inventories	12,175	14,814
Inventory reserve	(399)	(826)
Net Inventories	\$ 11,776	\$ 13,988

**5. Property, Plant and Equipment**

Major classifications and expected lives of property, plant and equipment are summarized below:

(In thousands)	<b>Expected Life</b>	<b>December 31,</b>	<b>2016</b>	<b>2015</b>
----------------	----------------------	---------------------	-------------	-------------



Edgar Filing: TOR MINERALS INTERNATIONAL INC - Form 10-K

Land	--	\$	292	\$	300
Office buildings	39 years		4,280		4,400
Production facilities	10 - 20 years		10,734		10,321
Machinery and equipment	3 - 15 years		24,492		22,412
Furniture and fixtures	3 - 20 years		1,706		1,494
Total			41,504		38,927
Less accumulated depreciation			(25,968)		(23,973)
Property, plant and equipment, net			15,536		14,954
Construction in progress			371		2,518
		\$	15,907	\$	17,472

The amounts of depreciation expense calculated on the Company's property, plant and equipment for the year ended December 31, 2016 and 2015 was \$2,561,000 and \$2,863,000, respectively.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**6. Segment Information**

The Company and its subsidiaries operate in the business of pigment manufacturing and related products in three geographic segments – United States, European and Asian.

**United States** – This segment represents products manufactured at our facility located in Corpus Christi, Texas. The segment manufactures HITOX, BARTEX, HALTEX, OPTILOAD and TIOPREM which is sold primarily in North, Central and South America. Sales of this segment, which includes intercompany purchases of ALUPREM from our European operation, represented approximately 69% of our consolidated sales for both of the years ended December 31, 2016 and 2015.

**European** – This segment represents products manufactured at the Company's wholly-owned operation, TPT, located in the Netherlands. TPT manufactures ALUPREM and BARYPREM which is sold primarily in Europe. Sales of this segment, which include intercompany purchases HITOX and TIOPREM from our Asian operation, represented approximately 24% and 23% of our consolidated sales for the years ended December 31, 2016 and 2015, respectively. Intercompany sales of ALUPREM between the TPT and the U.S. operation are eliminated in consolidation represented 44% and 33% of this segments total sales for the years ended December 31, 2016 and 2015, respectively.

**Asian** – This segment represents products manufactured at the Company's wholly-owned operation, TMM, located in Malaysia. TMM manufactures HITOX and TIOPREM which is sold primarily in Asia. Sales of this segment represented approximately 6% and 8% of our consolidated sales for the years ended December 31, 2016 and 2015, respectively. Intercompany sales of HITOX, TIOPREM and SR between the TMM and the U.S. and European operations are eliminated in consolidation represented 65% and 68% of this segments total sales for the years ended December 31, 2016 and 2015, respectively .

The accounting policies of the segments are the same as those described in the Summary of Significant Policies (See Note 1). Product sales of inventory between the U.S., European and Asian operations are based on inter-company pricing, which includes an inter-company profit margin. The segment profit (loss), included in the table below, from each location is reflective of these inter-company prices, as is inventory at the Corpus Christi location prior to elimination adjustments. The elimination entries include an adjustment to the cost of sales resulting from the adjustment to ending inventory to eliminate inter-company profit, and the reversal of a similar adjustment from a prior period. To the extent there are net increases/declines period over period in segment inventories that include an inter-company component, the net effect of these adjustments can decrease/increase location profit.

Such presentation is consistent with the internal reporting reviewed by the Company's chief operating decision maker ("CODM"). Our CODM regularly reviews financial information about our segments in order to allocate resources and evaluate performance. Our CODM assesses segment performance based on segment sales and segment net income (loss) before depreciation and amortization, interest expense, income taxes, and other items which management does not believe reflect the underlying performance of the segment.

For the year ended December 31, 2016, the U.S. operations received approximately 35% of its total third party sales revenue from a single customer; the European operations received approximately 17% from a single customer; and, the Asian operations received approximately 22% of its total third party sales revenue from a single customer. For the year ended December 31, 2015, the U.S. operations received approximately 25% of its total third party sales revenue from a single customer; the European operations received approximately 28% from two customers (16% and 12%); and, the Asian operations received approximately 34% of its total third party sales revenue from three customers (12%, 11%, and 11%).

Sales from the subsidiary to the parent company are based upon profit margins which represent competitive pricing of similar products. Intercompany sales consisted of ALUPREM, SR, HITOX and TIOPREM.

The Company's principal products, ALUPREM and HITOX, accounted for approximately 44% and 21%, respectively, of net consolidated sales in 2016 and approximately 36% and 28%, respectively in 2015.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

The Company sells its products to customers located in more than 60 countries. Sales to external customers are attributed to geographic area based on country of distribution. Sales to customers located in the U.S. represented approximately 62% and 58% for the years ended December 31, 2016 and 2015, respectively.

For the year ended December 31, 2016 and 2015, sales to customers in Germany represented approximately 22% and 23%, respectively, of our total foreign sales and sales to customers in Italy represented 10% of our 2016 total foreign sales.

Approximately 7% of the Company's employees are represented by an in-house collective bargaining agreement during 2016 as compared to approximately 12% in 2015.

A summary of the Company's manufacturing operations by geographic segment is presented below:

(In thousands)	United States (Corpus Christi)		European (TPT)		Asian (TMM)		Inter-Company Eliminations		Consolidated	
<b>As of and for the years ended:</b>										
<b><i>December 31, 2016</i></b>										
<i>Net Sales:</i>										
Customer sales	\$	26,678	\$	9,313	\$	2,465	\$	-	\$	38,456
Intercompany sales		98		7,357		4,535		(11,990)		-
Total Net Sales	\$	26,776	\$	16,670	\$	7,000	\$	(11,990)	\$	38,456
Share based compensation	\$	170	\$	-	\$	-	\$	-	\$	170
Depreciation	\$	1,076	\$	1,343	\$	142	\$	-	\$	2,561
Interest (income) expense	\$	(2)	\$	107	\$	72	\$	-	\$	177
Income tax (benefit) expense	\$	(131)	\$	247	\$	-	\$	(9)	\$	107
Location profit (loss)	\$	(406)	\$	826	\$	34	\$	(10)	\$	444
Capital expenditures	\$	463	\$	735	\$	5	\$	-	\$	1,203
Location long-lived assets	\$	5,291	\$	9,832	\$	784	\$	-	\$	15,907
Location assets	\$	17,013	\$	13,417	\$	6,013	\$	(714)	\$	35,729

**December 31, 2015***Net Sales:*

Customer sales	\$	25,646	\$	8,619	\$	2,794	\$	-	\$	37,059
Intercompany sales		37		4,309		5,832		(10,178)		-
Total Net Sales	\$	25,683	\$	12,928	\$	8,626	\$	(10,178)	\$	37,059
Share based compensation	\$	133	\$	-	\$	-	\$	-	\$	133
Depreciation	\$	1,011	\$	1,174	\$	678	\$	-	\$	2,863
Interest expense	\$	13	\$	25	\$	170	\$	-	\$	208
Income tax (benefit) expense	\$	(318)	\$	(69)	\$	681	\$	16	\$	310
Location profit (loss)	\$	(760)	\$	(225)	\$	(5,437)	\$	58	\$	(6,364)
Capital expenditures	\$	1,335	\$	4,676	\$	6	\$	-	\$	6,017
Location long-lived assets	\$	5,904	\$	10,618	\$	950	\$	-	\$	17,472
Location assets	\$	16,449	\$	13,617	\$	8,061	\$	(1,419)	\$	36,708

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**7. Quarterly Data**  
**(Unaudited)**

**TOR Minerals International, Inc. and Subsidiaries**  
**Consolidated Statements of Operations**  
**(In thousands, except per share amounts)**

	1st Qtr	2nd Qtr	2016 3rd Qtr	4th Qtr	Total
<b>NET SALES</b>	<b>\$ 9,572</b>	<b>\$ 9,850</b>	<b>\$ 10,036</b>	<b>\$ 8,998</b>	<b>\$ 38,456</b>
Cost of sales	8,247	8,680	8,452	7,982	33,361
<b>GROSS MARGIN</b>	<b>1,325</b>	<b>1,170</b>	<b>1,584</b>	<b>1,016</b>	<b>5,095</b>
Technical services and research and development	38	52	56	53	199
Selling, general and administrative expenses	842	1,062	1,068	1,182	4,154
(Gain) Loss on disposal of asset	(1)	-	4	(1)	2
<b>OPERATING INCOME (LOSS)</b>	<b>446</b>	<b>56</b>	<b>456</b>	<b>(218)</b>	<b>740</b>
<b>OTHER INCOME (EXPENSE):</b>					
Interest expense, net	(50)	(47)	(43)	(37)	(177)
Income (loss) on foreign currency exchange rate	(89)	10	20	9	(50)
Other income, net	12	16	-	10	38
	(127)	(21)	(23)	(18)	(189)
					<b>118</b>

Total Other  
Expense  
**INCOME**  
**(LOSS)**  
**BEFORE**  
**INCOME**  
**TAX**

**319**                      **35**                      **433**                      **(236)**                      **551**

Income tax  
expense

75                      (52)                      142                      (58)                      107

**NET**  
**INCOME**  
**(LOSS)**

**\$ 244**                      **\$ 87**                      **\$ 291**                      **\$ (178)**                      **\$ 444**

*Income (loss)*  
*per common*  
*share:*

Basic                      \$ 0.08                      \$ 0.03                      \$ 0.08                      \$ (0.05)                      \$ 0.13

Diluted                      \$ 0.08                      \$ 0.03                      \$ 0.08                      \$ (0.05)                      \$ 0.13

*Weighted*  
*average*  
*common*  
*shares*  
*outstanding:*

Basic                      3,014                      3,402                      3,542                      3,542                      3,376

Diluted                      3,187                      3,459                      3,550                      3,542                      3,454

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**7. Quarterly Data (Unaudited) - Continued**

**TOR Minerals International, Inc. and Subsidiaries**  
**Consolidated Statements of Operations**  
**(In thousands, except per share amounts)**

	<b>2015</b>				
	<b>1st Qtr</b>	<b>2nd Qtr</b>	<b>3rd Qtr</b>	<b>4th Qtr</b>	<b>Total</b>
<b>NET SALES</b>	<b>\$ 10,115</b>	<b>\$ 9,963</b>	<b>\$ 8,988</b>	<b>\$ 7,993</b>	<b>\$37,059</b>
Cost of sales	9,221	9,010	7,877	9,075	35,183
<b>GROSS MARGIN</b>	<b>894</b>	<b>953</b>	<b>1,111</b>	<b>(1,082)</b>	<b>1,876</b>
Technical services and research and development	55	44	44	35	178
Selling, general and administrative expenses	1,052	1,039	943	1,447	4,481
(Gain) Loss on disposal of asset	-	-	38	2,912	2,950
<b>OPERATING INCOME (LOSS)</b>	<b>(213)</b>	<b>(130)</b>	<b>86</b>	<b>(5,476)</b>	<b>(5,733)</b>
<b>OTHER INCOME (EXPENSE):</b>					
Interest expense, net	(80)	(60)	(37)	(31)	(208)
Income (loss) on foreign currency exchange rate	22	1	(157)	(3)	(137)
Other income, net	-	9	9	6	24
Total Other Expense	(58)	(50)	(185)	(28)	(321)
<b>LOSS BEFORE INCOME TAX</b>	<b>(271)</b>	<b>(180)</b>	<b>(99)</b>	<b>(5,504)</b>	<b>(6,054)</b>
Income tax (benefit) expense	(81)	(73)	22	442	310
<b>NET LOSS</b>	<b>\$ (190)</b>	<b>\$ (107)</b>	<b>\$ (121)</b>	<b>\$ (5,946)</b>	<b>\$ (6,364)</b>
<i>Loss per common share:</i>					
Basic and diluted	\$ (0.06)	\$ (0.04)	\$ (0.04)	\$ (1.97)	\$ (2.11)
<i>Weighted average common shares outstanding:</i>					
Basic and diluted	3,014	3,014	3,014	3,014	3,014



F – 21

---

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**8. Calculation of Basic and Diluted Earnings per Share**

(in thousands, except per share amounts)

	<b>Years Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
<b>Numerator:</b>		
Net Income (Loss)	\$ 444	\$ (6,364)
<b>Denominator:</b>		
Denominator for basic earnings (loss) per share		
- weighted-average shares	3,376	3,014
Dilutive potential common shares	78	-
Denominator for diluted earnings (loss) per share - weighted-average shares and assumed conversions	3,454	3,014
<b><i>Basic and diluted earnings (loss) per common share</i></b>	<b>\$ 0.13</b>	<b>\$ (2.11)</b>

For the year ended December 31, 2015, approximately 528,000 detachable warrants (the “Warrants”) were excluded from the calculation of diluted earnings per share as the effect would be anti-dilutive. The Warrants, issued in May 2009 with our six percent (6%) convertible subordinated debentures, were exercised prior to the May 4, 2016 maturity at an exercise price of \$2.65.

Approximately 130,000 and 146,000 employee stock options were excluded from calculation of diluted earnings per share for the years ended December 31, 2016 and 2015, respectively, as the effect would be anti-dilutive.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**9. Income Taxes**

The Company provides for deferred taxes on temporary differences between the financial statements and tax bases of assets using the enacted tax rates that are expected to apply to taxable income when the temporary differences are expected to reverse.

At December 31, 2016, our U.S. operation had federal NOL carry-forwards of approximately \$930,000 which resulted in a deferred tax asset (“DTA”) of approximately \$316,000 which will begin to expire in 2033. We have determined that it is not necessary to provide a valuation allowance for our U.S. NOL as we believe the DTA is fully recoverable.

At December 31, 2016, our Asian operation, TMM, had NOL carry-forwards of approximately \$3,159,000 and certain other deferred tax assets of approximately \$3,128,000 which resulted in a DTA of approximately \$1,509,000. Due to the uncertainties regarding TMM’s ability to utilize these DTAs, the Company established a valuation allowance to fully reserve against these DTAs.

The undistributed earnings of the Company’s foreign subsidiaries are considered to be indefinitely reinvested. Accordingly, no provision for U.S. federal and state income taxes or foreign withholding taxes has been provided on approximately \$4,000,000 of such cumulative undistributed earnings. Determination of the potential amount of unrecognized deferred U.S. income tax liability and foreign withholding taxes is not practicable because of the complexities associated with its hypothetical calculation.

**Components of Pretax Income (Loss)**

(In thousands)

	<b>Years Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Domestic	\$ (537)	\$ (1,078)
Foreign	1,088	(4,976)
Pretax income (loss)	\$ 551	\$ (6,054)

**Components of Income Tax Expense (Benefit)**  
**Years Ended December 31,**

(In thousands)	<b>2016</b>			<b>2015</b>		
	<b>Current</b>	<b>Deferred</b>	<b>Total</b>	<b>Current</b>	<b>Deferred</b>	<b>Total</b>
Federal	\$ -	\$ (140)	\$ (140)	\$ -	\$ (318)	\$ (318)
State	4	-	4	5	-	5
Foreign	247	(4)	243	(73)	696	623
Total Income Tax Expense (Benefit)	\$ 251	\$ (144)	\$ 107	\$ (68)	\$ 378	\$ 310

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

The following table accounts for the difference between the actual tax provision and the amounts obtained by applying the statutory U.S. federal income tax rate of 34% to income before taxes.

<b>Effective Tax Rate Reconciliation</b>	<b>Years Ended December 31,</b>	
(In thousands)	<b>2016</b>	<b>2015</b>
Expense (benefit) computed at statutory rate	\$ 187	\$ (2,059)
Change in valuation allowance - Foreign	(30)	1,703
Effect of items deductible for book not tax, net		
Share based compensation	40	45
Other	5	5
Effect of foreign tax credit	11	34
Effect of foreign tax rate differential	(109)	578
State income taxes, net of Federal benefit	3	4
	\$ 107	\$ 310

<b>Significant Components of Deferred Taxes</b>	<b>Year Ended December 31,</b>	
(In thousands)	<b>2016</b>	<b>2015</b>
<b>Deferred Tax Assets:</b>		
Net operating loss carry-forwards - Domestic	\$ 316	\$ 414
Net operating loss carry-forwards - Foreign	758	849
Intercompany profit	50	43
Alternative minimum tax credit carry-forwards	65	65
Domestic reserves	33	31
Foreign tax credits	642	675
Unrealized foreign currency losses - Foreign	-	68
Other deferred assets - Domestic	57	21
Other deferred assets - Foreign	107	118
	\$ 2,028	\$ 2,284
Valuation Allowance - Foreign	(1,478)	(1,703)
Total deferred tax assets	550	581

<b>Deferred Tax Liabilities:</b>		
PP&E - Domestic	\$ 590	\$ 732
PP&E - Foreign	52	30
Unrealized foreign currency gains - Domestic	-	59
Unrealized foreign currency gains - Foreign	5	-
Other	3	3

Total deferred tax liabilities		650		824
<b>Net deferred tax asset (liability)</b>	\$	(100)	\$	(243)

F – 24

---

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**10. Stock Options**

On February 21, 2000, the Company's Board of Directors approved the adoption of the 2000 Incentive Stock Option Plan (the "Plan") for TOR Minerals International, Inc. The Plan provides for the award of a variety of incentive compensation arrangements, including restricted stock awards, performance units or other non-option awards, to such employees and directors as may be determined by a Committee of the Board. At the Annual Shareholders' meeting on May 11, 2012, the maximum number of shares of the Company's common stock that may be sold or issued under the Plan was increased to 500,000 shares subject to certain adjustments upon recapitalization, stock splits and combinations, merger, stock dividend and similar events; in addition the Plan was extended to May 23, 2022.

For the years ended December 31, 2016 and 2015, the Company recorded \$170,000 and \$133,000, respectively, in stock-based employee compensation. This compensation cost is included in the general and administrative expenses and cost of sales in the accompanying consolidated statements of operations.

On April 21, 2016, the Board of Directors granted the officers of the Company non-qualifying stock options (the "Performance Awards"). The Performance Awards, which are subject to the terms, definitions and provisions of the 2000 Incentive Plan as amended, consist of the following grants:

<b>Officer's Name</b>	<b>Position</b>	<b>Five Year Performance Grant Award</b>
Olaf Karasch	President & Chief Executive Officer	150,000
Mark Schomp	Executive Vice President, Sales & Marketing	50,000
Barbara Russell	Treasurer & Chief Financial Officer	15,000

The Performance Awards, which vest over a five year period, are based solely on the basis of satisfaction of the performance criteria established annually by the Company's Board of Directors. The Performance Periods begin on January 1 of each calendar year and ending on December 31 of such year. The first Performance Period began on January 1, 2016 and ended on December 31, 2016. The final Performance Period shall begin on January 1, 2020 and shall end on December 31, 2020. The exercise price for the Performance Awards was set at the closing price of the Company's stock on January 4, 2016, as established by NASDAQ, at \$4.51 per share.

The 2016 Performance Awards consisted of 43,000 or one fifth of the five year total. Based on the satisfaction of the performance criteria established by the Company's Board of Directors for the year ended December 31, 2016, the actual number of Performance Awards vested consisted of 13,975 or approximately 32.5% of the annual grant.

The Company granted options to purchase 19,975 and 6,000 shares of common stock during the years ended December 31, 2016 and 2015, respectively. The weighted average fair value per option at the date of grant for options granted in the years ended December 31, 2016 and 2015 was \$2.73 and \$4.06, respectively, as valued using the Black-Scholes option-pricing model with the following weighted average assumptions:

	<b>Twelve Months Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Risk-free interest rate	1.90%	2.00%
Expected dividend yield	0.00%	0.00%
Expected volatility	0.59	0.66
Expected term (in years)	7.00	7.00

The risk free interest rate is based on the Treasury Constant Maturity Rate as quoted by the Federal Reserve at the time of the grant for a term equivalent to the expected term of the grant. The estimated volatility is based on the historical volatility of our stock and other factors. The expected term of options represents the period of time the options are expected to be outstanding from grant date.



**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

The following table summarizes certain information regarding stock option activity:

	Total Reserved	Outstanding	Options Weighted Avg Exercise Price	Range of Exercise Prices		
Balances at December 31, 2014	385,369	147,705	\$13.24	\$2.70	-	\$30.55
Granted		6,000	\$6.34	\$6.34	-	\$6.34
Forfeited or expired		(7,400)	\$30.27	\$29.50	-	\$30.55
Balances at December 31, 2015	385,369	146,305	\$13.24	\$2.70	-	\$30.55
Granted		19,975	\$4.50	\$6.34	-	\$6.34
Forfeited or expired		(13,116)	\$10.38	\$29.50	-	\$30.55
Balances at December 31, 2016	385,369	153,164	\$10.84	\$2.70	-	\$18.22

Of the 500,000 shares included in the Plan, there have been 114,631 options exercised. At December 31, 2016, there were 153,164 options outstanding and 232,205 were available for future issuance.

The number of shares of common stock underlying options exercisable at December 31, 2016 was 132,164. The weighted-average remaining contractual life of those options is 5.12 years. Exercise prices on options outstanding at December 31, 2016, ranged from \$2.70 to \$19.99 per share as noted in the following table.

Options Outstanding at December 31,		Range of Exercise Prices
2016	2015	

39,164	19,189	\$ 2.70 - \$ 9.99
90,500	103,616	\$ 10.00 - \$ 14.99
23,500	23,500	\$ 15.00 - \$ 19.99
153,164	146,305	

As of December 31, 2016, there was approximately \$140,000 of compensation expense related to non-vested awards. This expense is expected to be recognized over a weighted average period of 1.2809 years.

**11. Profit Sharing Plan**

The Company has a profit sharing plan that covers the U.S. employees. Contributions to the plan are at the option of and determined by the Board of Directors and are limited to the maximum amount deductible by the Company for Federal income tax purposes. For the years ended December 31, 2016 and 2015, there were no contributions to the plan.

The Company also offers U.S. employees a 401(k) savings plan administered by an investment services company. Employees are eligible to participate in the plan after completing six months of service with the Company. The Company matches contributions up to 4% of the employee's eligible earnings. Total Company contributions to the 401(k) plan for the years ended December 31, 2016 and 2015 was approximately \$66,000 and \$72,000, respectively.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**12. Derivatives and Other Financial Instruments**

The Company has exposure to certain risks relating to its ongoing business operations, including financial, market, political and economic risks. The following discussion provides information regarding our exposure to the risks of changing foreign currency exchange rates. The Company has not entered into these contracts for trading or speculative purposes in the past, nor do we currently anticipate entering into such contracts for trading or speculative purposes in the future. The foreign exchange contracts are used to mitigate uncertainty and volatility, and to cover underlying exposures.

***Foreign Currency Forward Contracts***

We manage the risk of changes in foreign currency exchange rates, primarily at our Malaysian operation, through the use of foreign currency contracts. Foreign exchange contracts are used to protect the Company from the risk that the eventual cash flows resulting from transactions in foreign currencies, including sales and purchases transacted in a currency other than the functional currency, will be adversely affected by changes in exchange rates. We report the fair value of the derivatives on our consolidated balance sheets and changes in the fair value are recognized in earnings in the period of the change.

At December 31, 2016 and 2015, we marked these contracts to market, recording \$2,000 and \$6,000, respectively, as a current liability on the consolidated balance sheets. For the years ended December 31, 2016 and 2015, we recorded a net loss on these contracts of \$3,000 and \$80,000, respectively, as a component of our net loss.

The following table summarizes the gross fair market value of all derivative instruments, in thousands, which are not designated as hedging instruments and their location in our consolidated balance sheets:

Derivative Instrument	Location	Liability Derivatives	
		December 31, 2016	December 31, 2015
Foreign Currency Exchange Contracts	Accrued Expenses	\$ 2	\$ 6

The following table summarizes the impact of the Company's derivatives, in thousands, on the consolidated financial statements of operations for the years ended December 31, 2016 and 2015:

<b>Derivative Instrument</b>	<b>Location of Loss on Derivative Instrument</b>	<b>Amount of Loss Recognized in Operations</b>			
		<b>Year Ended December 31,</b>			
		<b>2016</b>		<b>2015</b>	
Foreign Currency Exchange Contracts	Loss on foreign currency exchange rate	\$	3	\$	80

F – 27

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**13. Commitments and  
Contingencies**

**Land Lease**

The Company operates a plant in Corpus Christi, Texas. The facility is located in the Rincon Industrial Park on approximately 15 acres of land, with 13 acres leased from the Port of Corpus Christi Authority (the "Port") and approximately two acres owned by the Company. The lease payment is subject to an adjustment every 5 years for what the Port calls the "equalization valuation". This is used as a means of equalizing rentals on various Port lands and is determined solely at the discretion of the Port. The last equalization valuation was July 2012 at which time the annual lease increased from approximately \$54,000 to \$95,000. The Company and the Port executed an amended lease agreement on July 11, 2000, which extended the expiration date of the lease to June 30, 2027.

Minimum future rental payments for non-cancelable leases as of December 31, 2016 for the next five years ending December 31 and in total thereafter are as follows:

**Years Ending December 31,**

(In thousands)

2017	\$	114
2018		95
2019		95
2020		95
2021		95
Thereafter		527
Total minimum lease payments	\$	1,021

Rent expense under these leases was approximately \$114,000 and \$115,000 for the years ended December 31, 2016 and 2015, respectively.

**Contingencies**

There are claims arising in the normal course of business that are pending against the Company. While it is not feasible to predict or determine the outcome of any case, it is the opinion of management that the ultimate dispositions will have no material effect on the consolidated financial statements of the Company.

The Company believes that it is in compliance with all applicable federal, state and local laws and regulations relating to the discharge of substances into the environment, and it does not expect that any material expenditure for environmental control facilities will be necessary in order to continue such compliance.

**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**14. Significant Customers**

For the years ended December 31, 2016 and 2015, one customer accounted for approximately 24% and 18%, respectively, of our total consolidated sales revenue. Amounts included in Accounts Receivable for this customer as of December 31, 2016 and 2015 were approximately \$290,000 and 140,000, respectively.

**15. Foreign Customer Sales**

Revenues from sales to customers located outside the U.S. for the years ended December 31, 2016 and 2015 are as follows:

(In thousands)	Year Ended December 31,	
	2016	2015
Canada, Mexico & South/Central America	\$ 2,608	\$ 3,894
Pacific Rim	2,417	2,906
Europe, Africa & Middle East	9,595	8,461
Total Foreign Sales	\$ 14,620	\$ 15,261

For the years ended December 31, 2016 and 2015, Germany represented 22% and 23%, respectively, of our foreign sales and Italy represented 10% of our 2016 foreign sales.

**16. Sales by Product**

Revenues from sales by product for the years ended December 31, 2016 and 2015 are as follows (in thousands):

Product	2016			2015			Variance		
ALUPREM	\$	16,802	44%	\$	13,319	36%	\$	3,483	26%
HITOX		8,006	21%		10,392	28%		(2,386)	-23%
BARTEX / BARYPREM		8,217	21%		8,417	23%		(200)	-2%
HALTEX / OPTILOAD		4,364	11%		3,462	9%		902	26%
TIOPREM		742	2%		718	2%		24	3%
SR		-	0%		14	<1%		(14)	-100%
OTHER		325	1%		737	2%		(412)	-56%
Total	\$	38,456	100%	\$	37,059	100%	\$	1,397	4%



**TOR Minerals International, Inc. and Subsidiaries**  
**Notes to the Consolidated Financial Statements**  
**December 31, 2016 and 2015**

**TOR Minerals International, Inc. and Subsidiaries**  
**Schedule II - Valuation and Qualifying Accounts**  
**Years Ended December 31, 2016 and 2015**  
(In thousands)

		Additions		Deductions			
	Balance at					Effect of	
	Beginning of	Charged to	Credited to	Written Off		Exchange	Balance at
	Year	Operations	Operations			Rate	End of year
						Changes	
<b>Allowance for Doubtful</b>							
<b>Accounts Receivable:</b>							
2016	\$ 366	\$ 42	\$ (295)	\$ -	\$ (11)		102
2015	\$ 83	\$ 312	\$ (25)	\$ -	\$ (4)		366

		Additions		Deductions			
	Balance at	Charged to	Credited to	Written Off	Effect of		Balance at
	Beginning of	Operations	Operations		Exchange		End of year
	Year				Rate		
					Changes		
Inventory							
Reserve:							
2016	\$ 826	\$ 60	\$ (458)	\$ -	\$ (29)		399
2015	\$ 85	\$ 2,614	\$ (1,869)	\$ -	\$ (4)		826

		<b>Additions</b>		<b>Deductions</b>			
	<b>Balance at</b>	<b>Charged to</b>	<b>Credited to</b>	<b>Charged to</b>	<b>Credited to</b>	<b>Other</b>	<b>Balance at</b>
	<b>Beginning of</b>	<b>Operations</b>	<b>Comprehensive</b>	<b>Operations</b>	<b>Comprehensive</b>	<b>Adjustments</b>	<b>End of year</b>
	<b>Year</b>		<b>Income</b>		<b>Income</b>		
			<b>Paid-in</b>		<b>Paid-in</b>		
			<b>Capital</b>		<b>Capital</b>		
			<b>and Other</b>		<b>and Other</b>		
<b>Deferred</b>							
<b>Tax</b>							

**Valuation  
Allowance:**

2016	\$	1,703	\$	-	\$	-	\$	(225)	\$	-	\$	-	\$	1,478
2015	\$	-	\$	1,703	\$	-	\$	-	\$	-	\$	-	\$	1,703

F – 30