

CHARLES & COLVARD®

THE ORIGINAL CREATED MOISSANITE™

2016 YEAR IN REVIEW

“

Meet the diamond
alternative seducing
the Millennial
jewellery market.

”

HARPER'S BAZAAR¹

¹ Boyd, C., "Introducing Space Diamonds: Why you might want a moissanite engagement ring". *Harper's Bazaar*, August 08, 2016
<http://www.harpersbazaar.co.uk/bazaar-brides/news/a37311/introducing-space-diamonds-why-you-might-want-a-moissanite-engagement-ring/>

THE YEAR IN REVIEW

As CEO, I'm proud to say we've been moving at top speed to execute the initiatives laid out in 2016 — launching our new brand and moving up-market, expanding traditional channels and advancing e-commerce, amplifying outreach via online marketplaces and increasing our followers on social media. I'm pleased to say we have a lot of positive momentum to show for our efforts.

A successful pivot.

When I came on board, we took a careful look at the jewelry market and identified several ways to refocus our business to take advantage of emerging trends. In particular, demographic shifts are moving strongly in favor of millennials, and changes in the jewelry landscape are creating a huge opportunity for us to gain more — and more valuable — market share with Forever One™. In response, we acted quickly and strategically.

Moving up-market.

Our lab-created gems are competing directly with diamond for share of wallet. In fact, it's estimated that up to 10%² of the \$80 billion global jewelry market³ will soon shift to lab-created gemstones.

We've aggressively repositioned ourselves to align with the purchasing preferences and principles of this new market segment, and to create meaningful distance between us and moissanite competitors.

Presenting Charles & Colvard as an upscale brand involved both a new look-and-feel and a new story to tell. It's a story about the way Forever One — the epitome of created moissanite — is helping change the way the world thinks about gemstone quality and socially responsible jewelry. It plays to the strengths of our ethical and environmentally friendly development process, aligns with the sensibilities of our key emerging audience and, of course, highlights the unparalleled fire and brilliance of our created gemstones.

Unleashing Forever One™.

Building on the successful launch of Forever One colorless moissanite in late 2015, we launched Forever One G-H-I — our near-colorless grade of moissanite equivalent to G-H-I diamonds on the GIA color scale — and introduced innovative new cuts such as Asscher, pear, radiant, emerald and hearts & arrows.

With our expanded offering came a new elevated product line — one with both traditional selections and more modern looks designed for our millennial customers. We've diversified the product mix, offering eye-catching options in fashion, fine and bridal jewelry. While bridal is still a leading category, we believe our other collections position us to appeal to a wider audience on a wider array of occasions — fostering a continuous roll out of new styles to build brand engagement. We also expanded our Limited Lifetime Warranty — signaling that Charles & Colvard provides the kind of service and level of quality customers expect of a high-end brand.

Behind the scenes, a streamlined and robust supply chain enables us to keep up with rising demand — as we grow sales across retail, wholesale and third-party website channels in addition to our charlesandcolvard.com website.



² Patterson, S., and A. MacDonald, "De Beers Tries to Counter a Growing Threat: Man-Made Diamonds". *The Wall Street Journal*, November 06, 2016
<https://www.wsj.com/articles/de-beers-tries-to-counter-a-growing-threat-man-made-diamonds-1478434763>

³ The Diamond Insight Report, 2015

BUILDING MOMENTUM

Growing our traditional channels.

To give consumers first-hand exposure to Forever One's fire and brilliance, brick-and-mortar stores continued to be a focus in 2016. We launched a successful in-store trial with a leading fine jewelry retailer — so successful that we expanded to more than 50 of their stores by the holiday season, and are doubling our presence again this year. In total, we were able to grow our existing wholesale channels by 21%.

Developing an omni-channel strategy.

Consumers are everywhere — and thanks to mobile technology, we can reach them just about anywhere. So we adopted leading technologies and channels to create an engaging experience everywhere we interact with customers — from the laptop to the TV, the retail store to social media, the online marketplace to the Charles & Colvard website.

Our investment in new, leading-edge technology platforms position us to deliver the latest in consumer shopping experiences and ensure customer-friendly transactions across multiple online touch points.

We gained traction and grew awareness by partnering with complementary online-only retailers, and we established a meaningful marketplace presence in the U.S. Amazon is our leading marketplace channel, and demand continues to grow.

And, to go where the customers are, we extended our reach into new marketing channels. A carefully targeted digital awareness campaign utilized social channels to engage customers and prospects — the first step in a coordinated process that leads from awareness to conversion. Early outcomes have been extremely positive, laying the groundwork for ongoing outreach that we believe will ultimately translate into increased sales.

Building momentum.

With a successfully executed pivot, an infrastructure built for scale and a budding relationship with millennials, it's time to grow.

As we head into 2017, we're looking ahead to further refining and expanding our Forever One product line and finished jewelry selection. Our future success hinges on bolstering brand awareness, enhancing the customer experience and converting engaged shoppers into loyal buyers. That means pulling in consumers with targeted global marketing campaigns, while leveraging social influencers to introduce ourselves to millions of like-minded followers.

Yes, we have ambitious goals. They're all carefully considered, and are being met with strategies that promote synergies across channels to maximize cost-effective opportunities for growth.

It's all part of our push toward global growth and profitability, and our goal of delivering more good news in the year ahead.

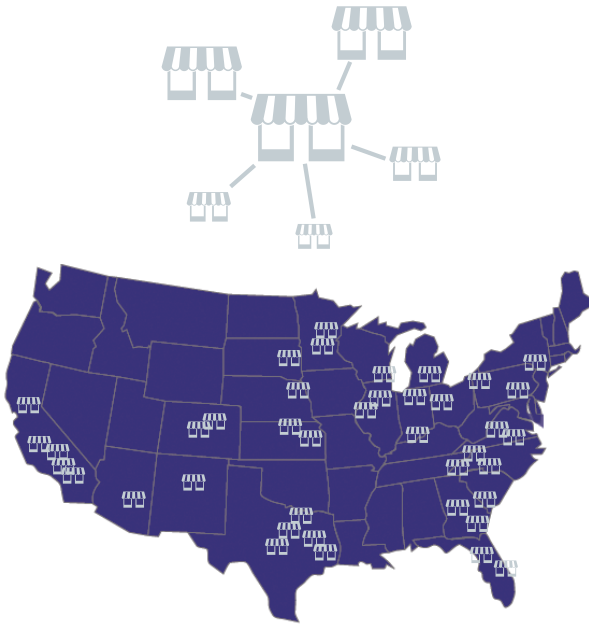
Suzanne Miglucci

President & CEO

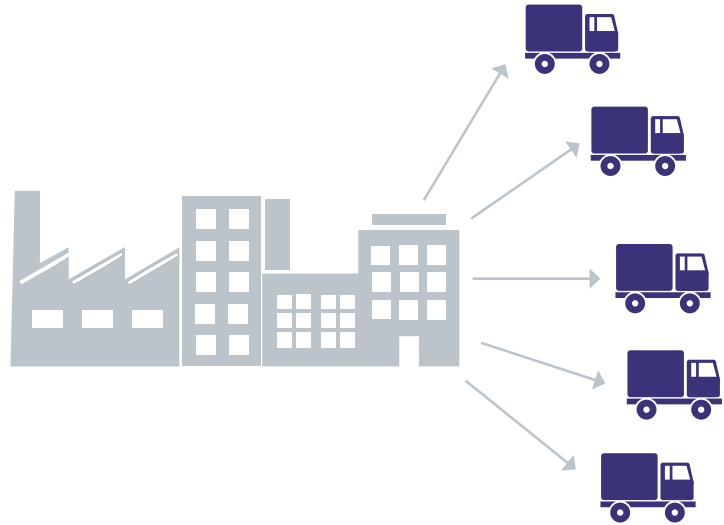


PARTNERS

Partnered with large fine jewelry retailer and expanded into brick-and-mortar stores across the U.S.

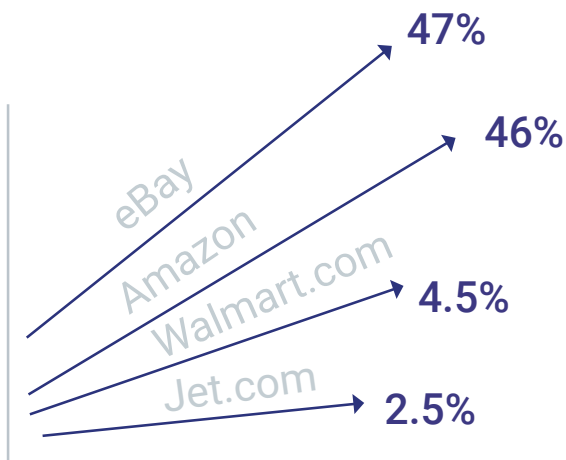


Grew our existing wholesale channels by 21%.



OMNI-CHANNEL

Established a meaningful presence on U.S. marketplaces.



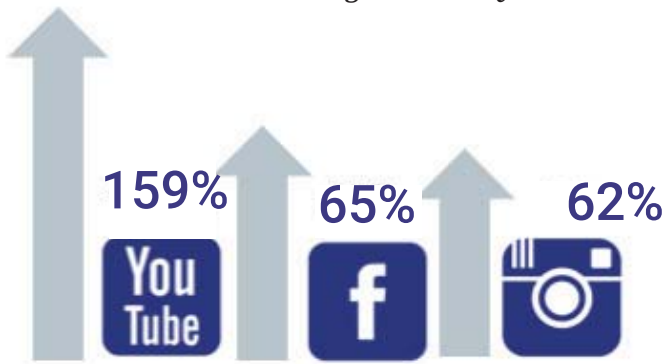
2016 Marketplace sales growth

Invested in a new leading-edge technology platform to deliver the latest in consumer shopping experiences across all device types.

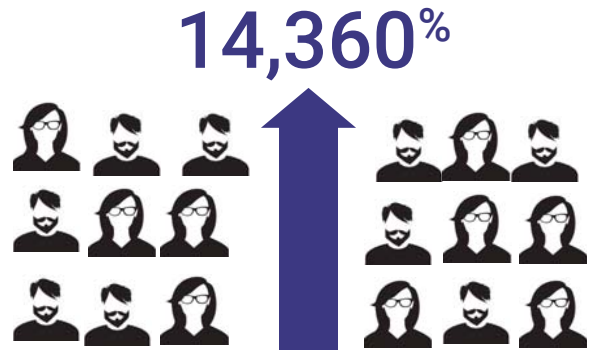


SOCIAL MEDIA BY THE NUMBERS

Social media growth in Q4.



Increased traffic from social media sites to charlesandcolvard.com.



55%

of millennial survey respondents rely on social media as their primary source for shopping information and news.⁵

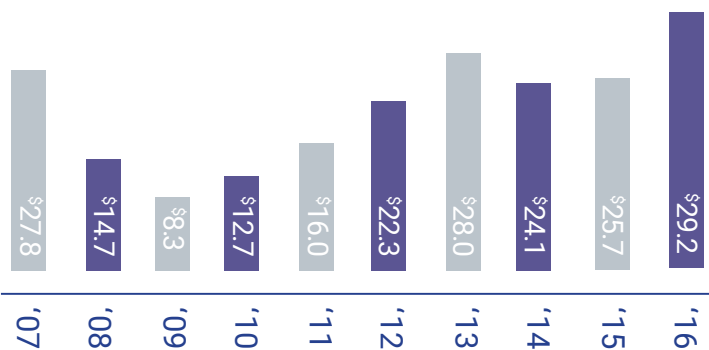


Millennials are **3X** more likely to reference social media networks when making purchase decisions.⁶



CHARLES & COLVARD BY THE NUMBERS

Revenue from continuing operations⁷



Change over prior year⁸

+41%

cash on hand



-13%

decrease in inventory on hand



⁵ "UPS Pulse of the Online Shopper™ - A customer experience study". A UPS White Paper, June 2014 <https://www.ups.com/media/en/2014-UPS-Pulse-of-the-Online-Shopper.pdf>

⁶ "International Market Strategies Study: Millennial Shoppers Trust Social Media More but Diversify Beyond Facebook". 2014 Study by Market Strategies International, June 10, 2014 <http://www.marketstrategies.com/news/2380/1/Market-Strategies-Study--Millennial-Shoppers-Trust-Social-Media-More-but-Diversify-Beyond-Facebook.aspx>

⁷ Charles & Colvard, Ltd. 2007-2016. Forms 10-K adjusted for divestiture of Lulu Avenue®

⁸ Charles & Colvard, Ltd Form 10-K

BRAND

Elevated our brand with a new look-and-feel.



“

Moissanite is a lab-created gemstone getting a lot of attention from millennial brides. It's sustainable and conflict-free, meaning you won't have to worry about its origins. It also touts unrivaled fire and brilliance, ensuring you outshine everyone in the room.

”

WEDDING CHICKS⁴

FOREVER ONE™

Diversified our product mix — from fashion to fine and bridal choices.



⁴ Michelle, "Is The Diamond Dead? Keep Up On The Latest Engagement Ring Trend". *Wedding Chicks*, December 02, 2016
<http://www.weddingchicks.com/blog/is-the-diamond-dead-keep-up-on-the-latest-engagement-ring-trend-1-14055-1-70.html>

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

OR

Transition report pursuant to Section 13 of 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission File Number: 000-23329

Charles & Colvard, Ltd.

(Exact name of registrant as specified in its charter)

North Carolina

(State or other jurisdiction of
incorporation or organization)

56-1928817

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

170 Southport Drive

Morrisville, North Carolina

(Address of principal executive offices)

27560

(Zip Code)

(919) 468-0399

(Registrant's telephone number, including area code)

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

Title of each class

Name of each exchange on which registered

Common Stock, no par value per share

The NASDAQ Stock Market LLC

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange 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 Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T 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 disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input checked="" type="checkbox"/>

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

As of June 30, 2016, the aggregate market value of the registrant's voting and non-voting common stock held by non-affiliates of the registrant was \$19,558,694 based on the closing sales price as reported on The NASDAQ Global Select Market.

As of March 3, 2017, there were 21,386,136 shares of the registrant's common stock, no par value per share, outstanding.

DOCUMENT INCORPORATED BY REFERENCE

Certain portions of the Proxy Statement for the registrant's 2017 Annual Meeting of Shareholders to be held on May 17, 2017 are incorporated by reference into Part III of this Annual Report on Form 10-K.

CHARLES & COLVARD, LTD.

FORM 10-K

For the Fiscal Year Ended December 31, 2016

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Statements expressing expectations regarding our future and projections relating to products, sales, revenues, and earnings are typical of such statements and are made under the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, statements about our plans, objectives, representations, and contentions and are not historical facts and typically are identified by use of terms such as “may,” “will,” “should,” “could,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “continue,” and similar words, although some forward-looking statements are expressed differently.

All forward-looking statements are subject to the risks and uncertainties inherent in predicting the future. You should be aware that although the forward-looking statements included herein represent management’s current judgment and expectations, our actual results may differ materially from those projected, stated, or implied in these forward-looking statements as a result of many factors including, but not limited to, our dependence on consumer awareness, acceptance, and growth of sales of our products resulting from our strategic initiatives; dependence on a limited number of customers; the impact of the execution of our business plans on our liquidity; our ability to fulfill orders on a timely basis; the financial condition of our major customers and their willingness and ability to market our products; dependence on our exclusive supply agreement with Cree, Inc. for the sole supply of the raw material; intense competition in the worldwide jewelry industry; our ability to successfully manage the transition of our Chief Financial Officer and other organizational change; our ability to maintain compliance with the continued listing requirements of The NASDAQ Stock Market LLC, or NASDAQ; our current wholesale customers’ potential perception of us as a competitor in the finished jewelry business; quality control challenges from time to time that can result in lost revenue and harm to our brands and reputation; general economic and market conditions, including the current economic environment; risks of conducting business in foreign countries; the impact of natural disasters on our operations; the pricing of precious metals, which is beyond our control; the potential impact of seasonality on our business; our ability to protect our intellectual property; the risk of a failure of our information technology infrastructure to protect confidential information and prevent security breaches; the impact of significant changes in e-commerce opportunities, technology, or models; the failure to evaluate and integrate strategic opportunities; possible adverse effects of governmental regulation and oversight; and the impact of anti-takeover provisions included in our charter documents, in addition to the other risks and uncertainties described in more detail in “Risk Factors” in Part I, Item 1A of this Annual Report on Form 10-K. Forward-looking statements speak only as of the date they are made. We undertake no obligation to update or revise such statements to reflect new circumstances or unanticipated events as they occur except as required by the federal securities laws, and you are urged to review and consider disclosures that we make in the reports that we file with the Securities and Exchange Commission, or SEC, that discuss other factors relevant to our business.

PART I

Item 1. Business

General

Charles & Colvard, Ltd., a North Carolina corporation founded in 1995 (which may be referred to as Charles & Colvard, we, us, or our), manufactures, markets, and distributes *Charles & Colvard Created Moissanite*[®] (which we refer to as moissanite or moissanite jewels) and finished jewelry featuring moissanite for sale in the worldwide jewelry market. Moissanite, also known by its chemical name silicon carbide (SiC), is a rare mineral first discovered in a meteorite crater. Because naturally occurring SiC crystals are too small for commercial use, larger crystals must be grown in a laboratory. Leveraging our advantage of being the original and leading worldwide source of created moissanite, our strategy is to establish Charles & Colvard with reputable, high-quality, and sophisticated brands across multiple channels, and to position moissanite as an ethically-sourced, affordable, and luxurious alternative to other gemstones such as diamond. We believe this is possible due to moissanite’s exceptional brilliance, fire, durability, and rarity like no other jewel available on the market. We sell loose moissanite jewels and finished jewelry at wholesale to distributors, manufacturers, retailers, TV shopping networks, and designers, and at retail to end consumers through our wholly owned operating subsidiaries, charlesandcolvard.com, LLC (formerly Moissanite.com, LLC) and Charles & Colvard Direct, LLC (until March 2016), and through third-party marketplaces. As of September 30, 2016, we changed the name of our wholly owned

subsidiary Moissanite.com, LLC to charlesandcolvard.com, LLC.

In February 2016, we made the strategic decision to explore a potential divestiture of our direct-to-consumer home party business previously operated through our Charles & Colvard Direct, LLC (dba *Lulu Avenue*®) subsidiary. After careful analysis of our core competencies, go-to-market strategies, and intent to advance toward profitability, the management team and Board of Directors determined a divestiture of this distribution channel to be in our best interest and our shareholders' best interest. On March 4, 2016, we and Charles & Colvard Direct, LLC entered into an asset purchase agreement with Yanbal USA, Inc., or Yanbal, under which Yanbal purchased certain assets related to our direct-to-consumer home party business for \$500,000 and assumed certain liabilities related to such assets. A more detailed description of this transaction is included in Note 12, "Discontinued Operations", in the Notes to the Consolidated Financial Statements.

As a result of the divestiture of our direct-to-consumer home party business operated through our Charles & Colvard Direct, LLC (dba *Lulu Avenue*®) subsidiary, during the three months ended March 31, 2016, we began managing our business primarily through our two continuing distribution channels. Accordingly, for the years ended December 31, 2016 and 2015, our reportable segments are our wholesale distribution channel transacted through our parent entity, and our direct-to-consumer distribution channel transacted through the wholly owned operating subsidiary, charlesandcolvard.com, LLC. We are now presenting the operating results of Charles and Colvard Direct, LLC as a discontinued operation.

We sell our loose moissanite jewels at wholesale to some of the largest distributors and jewelry manufacturers in the world, which mount them into fine jewelry to be sold at retail outlets and via the Internet. We also sell loose moissanite jewels and finished jewelry featuring moissanite at wholesale to retailers, TV shopping networks, and designers to be sold to end consumers and directly to consumers through our e-commerce sales channel charlesandcolvard.com and third-party marketplaces. We believe our continued and expanding use of multiple sales channels to the jewelry trade and the end consumer with branded finished jewelry featuring moissanite positions Charles & Colvard goods at the many touchpoints where consumers are when they are making their buying decisions – thereby creating greater exposure for our brand and increasing consumer demand.

United States, or U.S., sales represented 90% and 86% of total consolidated net sales for the years ended December 31, 2016 and 2015, respectively. Our largest customer during the year ended December 31, 2016 accounted for 23% of our total consolidated sales compared to 25% during the year ended December 31, 2015. A second customer accounted for 17% of our total consolidated sales during the year ended December 31, 2016, compared to 11% during the year ended December 31, 2015. No additional customers accounted for more than 10% of total consolidated sales in 2016 or 2015.

2016 was a pivotal year for Charles & Colvard. Acting on our vision which is driven by an ethical promise: "create the world's most brilliant gem, while leading the way for environmentally and socially responsible choices in the jewelry industry at a revolutionary value," we embarked on a corporate re-branding initiative designed to position our brand as a premier, consumer-facing purveyor of jewels and fine jewelry. We believe this new brand presence positions us with a platform that can support our multi-channel, global expansion strategy. Over the course of the year, we delivered key elements of our strategic plan in support of this new brand roll-out including expansion of *Forever One*™, a move up-market, expansion of our jewelry line, growth within our traditional channels, expansion of our direct-to-consumer e-commerce business and a laser focus on millennials. A more detailed description of our achievements in 2016 is included in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations", in this Annual Report on Form 10-K.

Our go-forward strategy is one of optimization and growth. Our future success will be measured on our ability to expand existing channels while discovering new channel partners and new markets through calculated sales and marketing efforts. Our key strategies for 2017 are as follows:

- *Innovate the Forever One*™ product line. We plan to invest research and development funds and efforts into the continued expansion of the *Forever One*™ offering including new jewel shapes and sizes.
- *Expand our finished jewelry line.* We plan to collaborate with key designers and jewelry suppliers to expand our product line and introduce new collections of fashion, fine, and bridal jewelry.

- *Invest in key retail and wholesale partnerships.* We plan to leverage significant groundwork laid with existing partners whose brands and customers align with ours to amplify our reach into these established markets.
- *Explore new traditional and non-traditional sales channels.* We plan to discover unexplored channels as green field opportunities that may open new and innovative ways to reach the consumer where they are shopping.
- *Convey e-commerce learning to new channels.* We plan to leverage our experience and significant underpinnings in e-commerce to expand our footprint into new channels and regions.
- *Evolve our customer service function.* We plan to continually improve our customer service function with the intention of delivering world-class service to our wholesale partners and direct consumers.
- *Amplify our global marketing efforts.* We plan to carefully measure the return on our marketing investments, and focus our efforts on profitable endeavors that drive interest in the Charles & Colvard brand, pull consumers to our many sales and educational outlets, and drive conversions.
- *Advance toward profitability.* We plan to make calculated investments in our growth while continually striving to reach profitability.

Moissanite

Moissanite is a rare, naturally occurring mineral that is generally very small in size, dark green or black in color, and not a commercially viable source of gemstone material. Therefore, we expect only lab-grown SiC crystals to provide a sustainable source of moissanite for jewels.

In addition to carat size, important characteristics of a gemstone are beauty, durability, and rarity. The beauty of a near-colorless and colorless gemstone is characterized by its color, brilliance, and fire. The brilliance of a gemstone is measured by its refractive index, or the extent to which, when coupled with the facet design, the gemstone reflects light. The fire of a gemstone, or the breaking of light rays into spectral colors, is measured by its dispersion. Durability is determined by a gemstone’s hardness, or resistance to scratching and toughness, or resistance to chipping or cleaving. Rarity is the availability or perceived availability of a gemstone.

Moissanite jewels have a unique combination of brilliance, fire, durability, and rarity. Moissanite’s beauty is objectively derived from its refractive index, which is higher than other gemstones, including diamond, and its hardness is greater than all known gemstone materials except diamond. As a result, moissanite jewels, like diamond, can be cut with sharp, well-defined, and highly polished facets that accentuate their brilliance and fire. The cutting specifications (facet arrangement and proportions) for moissanite jewels are designed to maximize the brilliance and fire of the material. Additionally, we evaluate the finished jewels to exacting standards with automated video-imaging equipment and specially trained quality control personnel. Due to the rare natural occurrence of moissanite and both the proprietary and technical limitations in producing mass quantities of gem-grade moissanite, we believe that moissanite is among the rarest of jewels.

The following table compares the physical properties of moissanite jewels with other fine gemstone materials:

Description	Refractive Index	Dispersion	Hardness (Mohs Scale) ⁽²⁾	Toughness
Charles & Colvard Created Moissanite [®]	2.65-2.69	0.104	9.25	Excellent
Diamond	2.42	0.044	10	Excellent*
Ruby	1.77	0.018	9	Excellent**
Sapphire	1.77	0.018	9	Excellent**
Emerald	1.58	0.014	7.50	Good to Poor

*In cleavage direction, toughness is “good”
 **Except twinned stones

1. Sources: Gemological Institute of America, [Gem Reference Guide for GIA Colored Stones](#), [Gem Identification and Colored Stone Grading Courses](#) 32-35, 65-82, 87-90 (1995); Cornelius S. Hurlburt, Jr. & Robert C. Kammerling, [Gemology](#) 320-324

(2d Ed. 1991); Kirk-Othmer, Encyclopedia of Chemical Technology 524-541 (5th Ed. 2004); Institution Of Electrical Engineers, Properties of Silicon Carbide (Gary L. Harris, Ed., 1995); Robert Webster, Gems: Their Sources, Descriptions and Identification 889-940 (5th Ed. 1994); W. von Muench, "Silicon Carbide" in Landolt-Börnstein Numerical Data and Functional Relationships in Science and Technology, New Series, Group III, Vol. 17C, pp. 403-416 and 585-592 (M. Schultz and H. Weiss, Eds., 1984); Kurt Nassau, Shane F. McClure, Shane Elen & James E. Shigley, "Synthetic Moissanite: A New Diamond Substitute", Gems & Gemology, Winter 1997, 260-275; Kurt Nassau, "Moissanite: A New Synthetic Gemstone Material", Journal of Gemmology, 425-438 (1999).

2. The Mohs Scale is a relative scale only, and quantitative comparisons of different gemstone materials cannot be made directly using the Mohs Scale. Moissanite jewels, while harder than all other known gemstones, are approximately one-half as hard as diamond.

Products and Product Development

Moissanite jewels

Historically, Charles & Colvard primarily sold near-colorless moissanite jewels including *Forever Classic™* and *Forever Brilliant®*. We continue to offer these products in a variety of shapes including round, square brilliant, princess, cushion, radiant, pear, marquise, heart, oval, and recently Asscher, among others, in sizes ranging from approximately 1.3 to 12 millimeters (approximately 0.008 to 5.3 carats). In 2015, we announced our latest product, the first colorless moissanite jewel, *Forever One™*, which graded as D-E-F using the Gemological Institute of America's color grading scale. Our limited launch was met with great enthusiasm from channel partners and consumers. In response to this demand, we expanded our *Forever One™* product line by offering, in the fourth quarter of 2016, the jewel in an additional color grade of G-H-I, and in more shapes and sizes.

Finished jewelry

We began selling finished jewelry featuring moissanite in 2010. Our basic designs include stud earrings, solitaire and three-stone rings, pendants, and bracelets. We are now selling an expanded selection of fashion-oriented, designer-inspired moissanite jewelry that we offer as an expansion to the basic line of jewelry. The primary ingredients of our moissanite finished jewelry are loose moissanite jewels that we have on hand as part of our finished goods inventory, white, yellow, and rose gold settings, sterling silver settings, and labor to mount the jewels into the settings.

In addition, we historically purchased fashion finished jewelry comprising base metals and non-precious gemstones for sale through *Lulu Avenue®*. This finished jewelry was fashion oriented and subject to styling trends that may change with each catalog season. The majority of this finished jewelry was custom designed for us. We made limited purchases of fashion finished jewelry after the divestiture of our direct-to-consumer home party business on March 4, 2016.

Source of Raw Material

Our moissanite jewels are made from gem-grade SiC crystals. Our sole supplier of SiC crystals is Cree, Inc., or Cree, with which we have certain exclusive supply rights for SiC crystals to be used for gemstone applications. We source the metals used for our finished jewelry, including white, yellow, and rose gold and sterling silver, from a number of manufacturers located primarily in the U.S. or internationally in China, India, Mexico, Hong Kong, or Thailand. In line with our goal of providing socially and ethically-sourced products, we require suppliers of our gold to certify that the gold is coming from conflict free sources and that all metals supplied to us are responsibly sourced.

Exclusive Supply Agreement with Cree

On December 12, 2014, we entered into a new exclusive supply agreement with Cree, or the Supply Agreement, which superseded and replaced our prior agreement with Cree. Under the Supply Agreement, subject to certain terms and conditions, we agreed to exclusively purchase from Cree, and Cree agreed to exclusively supply, 100% of our required SiC materials in quarterly installments that must equal or exceed a set minimum order quantity. The initial term of the Supply Agreement will expire on June 24, 2018, unless extended by the parties. We also have one option to unilaterally extend the term of the agreement for an additional two-year period, subject to certain conditions. Our total purchase commitment under the Supply Agreement until June 2018 is dependent upon the size

of the SiC material and ranges between approximately \$29.60 million and approximately \$31.50 million. As of December 31, 2016, our remaining purchase commitment through June 2018 under the Supply Agreement ranges from approximately \$14.54 million to approximately \$16.44 million.

On July 14, 2016, Cree announced that it had entered into an asset purchase agreement with Infineon Technologies AG, or Infineon, pursuant to which Infineon would purchase certain portions of Cree's SiC materials and gemstones business. The transaction, which Cree initially indicated was expected to close by the end of calendar year 2016, contemplated that the Supply Agreement, including all rights and obligations under the Supply Agreement, would be assigned by Cree to Infineon. On February 16, 2017, Cree announced that it was terminating the asset purchase agreement because Cree and Infineon were unable to identify alternatives that would address the national security concerns raised by the Committee on Foreign Investment in the United States. Accordingly, we expect that the terminated transaction will not have any material effect on our supply of SiC materials.

Intellectual Property

We had U.S. product and method patents for moissanite jewels that expired during 2015, under which we had broad, exclusive rights to manufacture, use, and sell moissanite jewels in the U.S. We had these same patents in 25 foreign jurisdictions primarily across Asia and Europe that expired in the third quarter of 2016, and will expire in Mexico, in 2021. In addition, we have certain trademarks and pending trademark applications that support our moissanite branding strategy. We anticipate new providers of moissanite will enter the market as most of our patents have expired. We know how challenging it is to create high-quality moissanite and anticipate it will take emerging providers significant time and investment to bring meaningful and competitive products to market. As we experienced ourselves, we anticipate it will take these new providers significant time to evolve from producing low-end moissanite to delivering high-quality gemstones in the colorless or near-colorless range. Achieving the capacity to consistently produce a high-quality moissanite product at mass scale requires a careful balance of silicon carbide-specific faceting skills and a well-tuned global supply chain. Therefore, we do not anticipate direct moissanite competition in the colorless grade D-E-F or near-colorless G-H-I grade ranges for some time to come.

Our success and our ability to compete successfully depend in part upon our proprietary technology. In addition to our remaining international patents, we rely on trade secret laws and employee, consultant, and customer confidentiality agreements to protect certain aspects of our technology. We currently are not subject to any claims that our products or processes infringe on the proprietary rights of third parties. At the present time, we are also dependent on Cree's technology for the production of SiC crystals.

Manufacturing and Quality Assurance

Moissanite jewels

The production of *Charles & Colvard Created Moissanite*[®] jewels is an elaborate process developed over a number of years of collaborative research and development, acquired and learned knowledge from scientists, and considerable investment expense.

Following are the key manufacturing processes of our moissanite jewels:

- growing gem-grade raw SiC crystals;
- manufacturing rough preforms;
- faceting jewels;
- polishing jewels; and
- inspecting, sorting, and grading.

Growing gem-grade raw SiC crystals - SiC crystal growth suitable for gem-grade usage at commercial quantities is proprietary both in design and in operational methodology. Cree has grown the majority of our SiC crystals in accordance with the terms of the Supply Agreement. We routinely evaluate the yield and quality of saleable moissanite jewels from SiC crystals. The yield of saleable jewels from each crystal is one of the most significant factors affecting the volume and cost of moissanite jewels available for sale. Yield is dependent on the quality of the crystals, and variations in crystal quality can adversely affect our gross margin percentage.

Manufacturing rough preforms - We have made considerable investment in the design, development, and

customization of a proprietary manufacturing process that includes equipment, software, and procedures to maximize raw material yield. The result is production of intermediary shapes, called “preforms,” that vary depending upon the size and shape of the finished jewel. We continue to invest research and development resources to improve raw material yield, including studying alternate preform shapes and cutting technologies, due to the dramatic effect such an improvement could have on our gross margin percentage.

Faceting and Polishing jewels - Each preform is hand-faceted and polished by our independent third-party gem-cutters based on master designs with multiple quality control measures built into the process. Gem-cutter training is a regimented program involving several months of progressive hands-on bench training. As we continue to expand the assortment of *Forever One™*, we will continue the process of certifying additional cutters to ensure sufficient scalability of our production capabilities to meet anticipated demand for this new finished jewel.

Inspecting, sorting, and grading - Similar to other gemstones, each faceted moissanite jewel greater than 2.5 millimeters in size is individually graded against established master standards using our specially trained personnel. Additionally, as part of our overall quality assurance program, a representative sample from each batch of jewels is submitted to an image analyzer to ensure critical angles and other attributes designed to maximize moissanite’s optical properties are consistently maintained. This phase of manufacturing is relatively labor-intensive and requires skills not readily available in the general work force. In the future, we may elect to outsource certain portions of this stage of the manufacturing process to independent third parties that we will require to adhere to our rigorous quality control and monitoring standards.

Finished jewelry

Our line of finished jewelry featuring moissanite is developed by a team of industry experts integrating our moissanite jewels into many forms of jewelry, generally made of 14 karat gold and sterling silver, either designed or purchased by us utilizing a core group of suppliers, manufacturers, and finishers. In addition to our Limited Lifetime Warranty offered on our moissanite jewels, we provide a twelve-month Limited Warranty on all finished jewelry featuring moissanite.

Our prior line of fashion finished jewelry, comprised of base metals and non-precious gemstones for sale through *Lulu Avenue®*, was either designed exclusively for us and manufactured to our specifications or purchased from a core group of suppliers and manufacturers. We made limited purchases of fashion finished jewelry after the divestiture of our direct-to-consumer home party business on March 4, 2016.

All procured finished jewelry components are sourced from our approved suppliers, and each finished jewelry item is jobbed and/or tracked by stock keeping unit, or SKU, utilizing our enterprise resource planning system. The components of moissanite finished jewelry comprised in each job are then manufactured into finished jewelry by assemblers either in the U.S. or internationally in China, India, Mexico, Hong Kong, or Thailand. We are continuously working with our existing manufacturing partners, as well as identifying new manufacturing partners, to expand our assortments and efficiencies.

All finished jewelry produced by us undergoes a multi-point inspection process. A representative sampling of manufactured finished jewelry items undergoes stone and metals testing to ensure that the items for sale are of the quality that we strive to maintain. Also, in line with our goal of providing socially and ethically-sourced products, we require suppliers of our gold to certify that the gold is coming from conflict free sources and that all metals supplied to us are responsibly sourced. If required by government ordinance or requested by a customer, we facilitate the inspection of our finished jewelry by internationally recognized testing facilities to comply with legal requirements and to ensure consumer confidence.

Marketing and Distribution

Marketing

Millennials and Social Media

- *Millennials* – This important age group is socially and ethically wired. They proactively seek out goods and services that align with their core principles and become devoted and vocal advocates of brands that embody ‘green’ practices. Our socially responsible and ethically-sourced product aligns directly with the

principles and purchasing requirements of the millennial and our quality and price point offer unprecedented value to the cost-conscious millennial. Throughout 2017, Charles & Colvard plans to continue proactively engaging this target market through a multi-channel traditional and digital marketing strategy.

- *Social Media* – To reinforce and support our position as the premier source of moissanite, our marketing team is working on several social media initiatives that target current and future moissanite consumers and support the promotion and sale of *Charles & Colvard Created Moissanite*®. Our campaigns are focused on driving a consistent message emphasizing the ethical origins of our jewels, their everlasting beauty, and overall value. We are using various forms of digital and social media outreach to accomplish greater awareness of the value proposition we offer.

Wholesale Distribution Segment

- *Marketing to the trade* – In 2016, we continued to target the trade with print advertisements featuring our *Forever Brilliant*® moissanite jewels and finished jewelry featuring the *Forever Brilliant*® jewel in leading trade publications, tagging key distributors to support sales growth. Our September 2015 launch of *Forever One*™ was a controlled event, and little advertising or promotion accompanied the release. We anticipate continuing to deliver meaningful promotion of *Forever One*™ in 2017 as we further expand this product line and expect that we will continue to see, as we did in 2016, the wholesale distribution segment transition to *Forever One*™.
- *Industry associations* – We maintain relationships with major jewelry industry organizations and jewelry trade publications as an opportunity to communicate with our peers on a consistent basis through media coverage, trade shows, and charitable events, among others.
- *Trade shows* – Our attendance at leading jewelry trade shows as a sponsor, an exhibitor, or a participant has helped us extend our outreach to customers. In 2016, we attended major domestic and international jewelry industry trade shows, including JCK in Las Vegas and the Hong Kong Gem and Jewellery Fair, and we intend to continue investing in these important industry events in 2017.
- *Cooperative advertising* – Some of our loose moissanite jewels wholesale customers participate in our cooperative advertising program, which reimburses, via a credit towards future purchases, a portion of their marketing costs based on the amount of their purchases from us, subject to the customer adhering to our branding guidelines and other conditions. We plan to de-emphasize broad-based cooperative advertising, but we will consider strategic opportunities to utilize this form of advertising.

Direct-to-Consumer E-commerce Segment

- *Consumer education* – Because education of the consumer is so important to sell-through of moissanite products, we continue to enhance our website www.charlesandcolvard.com to include extensive educational information about moissanite, in addition to general background information about our company. We expect to launch additional improvements and enhancements to our web presence in 2017.
- *Consumer advertising* – We are supporting our initiative to increase consumer awareness of moissanite and our finished jewelry primarily with various forms of digital communication, including targeted email and via social media outlets.
- *New e-commerce outlets* – We are firm believers in the importance of e-commerce to our growth strategy and are anticipating an expanded e-commerce footprint in 2017 across third-party marketplaces, comparison shopping engines, affiliate networks, digital marketing platforms, social commerce engines, and more.

Direct-to-Consumer Home Parties Segment

Previously, we marketed our finished fashion and moissanite jewelry offered by *Lulu Avenue*® through paid search advertising and various forms of electronic communication including social media campaigns. We also offered classes to our independent sales representatives, which we referred to as Style Advisors, to help promote consumer

education. Due to our divestiture of this distribution channel, we have not continued marketing of our prior direct-to-consumer home parties segment.

Distribution

Wholesale Distribution Segment

We generally have contracts and agreements with our domestic and international distributor, manufacturer, and retailer wholesale customers with some variations in terms and duration.

- *Domestic* - Finished jewelry featuring moissanite is sold through our wholesale distribution segment to consumers through a broad range of channels, including single- and multiple-location independent jewelry stores, jewelry store chains, online retailers, television shopping networks, department stores, and catalogs. We sell our loose moissanite jewels to wholesale distributors and finished jewelry manufacturers, which in turn set them in mountings and sell them to retailers, sell them through their own e-commerce sites, or resell the loose jewels at a markup. We also mount our loose jewels into our own jewelry, which we currently sell at wholesale to home shopping networks, various e-commerce websites, and select retailers. In addition, we have allowed loose moissanite jewels and finished jewelry inventory to be placed in stores on a consignment basis. We continue to evaluate our channel strategy for domestic wholesale distribution, which may result in a change to our historical distribution methods and partners.
- *International* - Our international wholesale distribution currently comprises primarily loose moissanite jewels that are sold to international distributors for resale to jewelry manufacturers and retailers in their local markets. We currently have over 20 international wholesale distributors for loose moissanite jewels covering portions of Western Europe, Australia, India, Southeast Asia, and the Middle East. We have continued to invest in certain international markets that we believe have the most potential with respect to acceptance and sales of the moissanite jewels, including Australia, China, India, Italy, and the United Kingdom. Export sales aggregated approximately \$3.00 million, or 10% of total consolidated net sales, and \$3.47 million, or 14% of total consolidated net sales, in 2016 and 2015, respectively. It should be noted that a portion of our international sales consists of finished jewels sold internationally that may be re-imported to U.S. retailers.

Direct-to-Consumer E-commerce Distribution Segment

We sell our loose moissanite jewels and finished jewelry featuring moissanite at retail through our direct-to-consumer charlesandcolvard.com, LLC e-commerce website at www.charlesandcolvard.com. We maintain on-hand stock for such basic designs as stud earrings, solitaire and three-stone rings, pendants, and bracelets and fulfill orders from our main facility. Other finished jewelry styles offered for sale on the website are made-to-order by several of our key distributors. We anticipate a continued focus and investment on site enhancement and responsiveness in order to provide our customers with a seamless shopping experience, whether the customer is shopping online from a desktop or mobile device. We believe these enhancements will drive improved customer traffic and conversion.

Currently, all of our direct-to-consumer e-commerce segment distribution is domestic. Sales made to international shipping addresses through our charlesandcolvard.com e-commerce website are shipped to a domestic third-party intermediary that assumes all risks and liabilities for the international transaction.

Direct-to-Consumer Home Parties Distribution Segment

Prior to the divestiture of the assets of this distribution channel, our finished fashion and moissanite jewelry offered by *Lulu Avenue*[®] was sold to consumers online at www.luluavenue.com; and in convenient, comfortable venues by our Style Advisors, using sample pieces contained in a sales kit purchased by the Style Advisor as part of the enrollment process. The Style Advisors supplemented the sample pieces with additional styles displayed in seasonal catalogs and online at www.luluavenue.com. Orders were entered by the Style Advisor into a back office system, and the products were fulfilled by a third-party logistics company that shipped the products to the Style Advisor or end consumer. All of our direct-to-consumer home party segment distribution was domestic.

Seasonality

Sales in the retail jewelry industry are typically seasonal due to increased consumer purchases during the holiday season. Because historically we have primarily sold our loose moissanite jewels and finished jewelry featuring moissanite at wholesale to distributors, manufacturers, and retailers, our sales to support the holiday season largely have taken place during the third and beginning of the fourth calendar quarters, depending on the sales channel and the level of advanced planning and production our customers undertook; however, the effect of seasonality on our business is also impacted by the timing of orders we receive to support new or expanded distribution and the level of current inventory position held by our customers. In recent years, excluding one-time sales events from time to time throughout the year, we have experienced a higher degree of seasonality in the fourth quarter than we have experienced in prior years primarily as a result of the holiday season sales to end consumers through our direct-to-consumer e-commerce website, charlesandcolvard.com and as a result of increased sales through televised home shopping networks within our wholesale distribution segment. In future periods, as sales of our finished jewelry increase to retailers and directly to consumers, both in dollars and as a percentage of total sales, we anticipate a seasonality trend more typical with the retail jewelry industry, and these factors may significantly affect our results of operations in a given quarter.

Working Capital Practices

Our primary source of working capital is cash on hand and cash generated by operations. Because we have a quarterly minimum purchase commitment under the Supply Agreement, we may be required to purchase SiC materials in excess of our immediate needs from time to time, which may result in inventories that are higher than we might otherwise maintain.

Our standard wholesale customer payment terms on trade receivables are generally between 30 and 90 days, though we may offer extended terms with specific customers and on significant orders from time to time. We extend credit to our customers based upon a number of factors, including an evaluation of the customer's financial condition and credit history that is verified through trade association reference services, the customer's payment history with us, the customer's reputation in the trade, and/or an evaluation of the customer's opportunity to introduce our moissanite jewels or finished jewelry featuring moissanite to new or expanded markets.

For our wholesale customers, our return policy allows for the return of jewels and finished jewelry for credit generally within 30 days of shipment and must be returned for a valid reason, such as quality problems or an error in shipment. For our direct-to-consumer sales channels, a customer can return purchases for any reason in accordance with our warranty policy as noted on the charlesandcolvard.com website. We have established an allowance for returns based on our historical return rate, which takes into account any contractual return privileges granted to our customers. Periodically, we ship loose jewel and finished jewelry goods to wholesale customers on consignment terms. Under these consignment terms, the customer assumes the risk of loss and has an absolute right of return for a specified period.

Competition

Our competitive success is reliant, in part, on the following:

- our ability to continue our relationship with Cree in order to sustain our supply of high-quality SiC crystals;
- our ability to understand the consumer market segment and effectively market to them a compelling value proposition that leads to converted customers;
- our continued success in developing and promoting brands for our moissanite jewels and finished jewelry featuring moissanite, resulting in increased interest and demand for moissanite jewelry at the consumer level;
- the continued willingness and ability of our jewelry distributors and other jewelry suppliers, manufacturers, and designers to market and promote *Charles & Colvard Created Moissanite*[®] to the retail jewelry trade;
- the continued willingness of distributors, retailers, and others in the channel of distribution to purchase loose *Charles & Colvard Created Moissanite*[®], and the continued willingness of manufacturers, designers, and retail jewelers to undertake setting of the loose jewels;
- our continued ability and the ability of manufacturers, designers, and retail jewelers to select jewelry settings that encourage consumer acceptance of and demand for our moissanite jewels and finished jewelry;
- our continued ability and the ability of jewelry manufacturers and retail jewelers to set loose moissanite

- jewels in finished jewelry with high-quality workmanship;
- our continued ability and the ability of retail jewelers to effectively market and sell finished jewelry featuring moissanite, including finished jewelry to consumers; and
- our ability to operationally execute our direct-to-consumer e-commerce business.

Moissanite jewels

Gemstone materials can be grouped into three types:

- natural gemstone, which is found in nature;
- synthetic gemstone, which has the same chemical composition and essentially the same physical and optical characteristics of natural gemstone but is created in a lab; and
- simulated or substitute material, which is similar in appearance to natural gemstone but does not have the same chemical composition, physical properties, or optical characteristics.

Our moissanite jewels compete with fine gemstones such as ruby, sapphire, emerald, and tanzanite as well as with natural, synthetic, and treated diamonds as a synthetic gemstone. We may also face competition from synthetic diamonds, synthetic diamond films, and other sources of synthetic moissanite not presently available in qualities, sizes, and volumes suitable for use as gemstones. Some suppliers of diamonds and other fine gemstones, as well as the suppliers of synthetic and simulated gemstones, have substantially greater financial, technical, manufacturing, and marketing resources and greater access to distribution channels than we do.

We market our unique jewel as a socially-conscious and ethically-sourced, affordable, luxurious alternative to diamond at price points that make our jewel more attainable by many consumers. The diamond industry enjoys higher consumer desirability and acceptance, which has been iconicized by the “Diamonds are Forever” marketing campaign. Historical efforts to differentiate moissanite from diamond as a unique jewel by virtue of its distinctive composition and its superior optical characteristics were a challenge, as moissanite resembles diamond in the eyes of consumers. Therefore, our 2016 marketing effort was to educate our target market on the social and ethical distinctions of our unique gemstones.

The worldwide market for large, uncut, high-quality natural diamonds is significantly consolidated and controlled by DeBeers (headquartered in South Africa), Alrosa (Russia), Rio Tinto (Australia), and BHP (Canada). These companies have a major impact on the worldwide supply and pricing of natural diamonds at both the wholesale and retail levels. Diamond producers may undertake additional marketing or other activities designed to protect the diamond jewelry market against sales erosion from consumer acceptance of moissanite jewels.

We may also face competition from treated and synthetic diamonds. Treated diamonds, which are natural diamonds with imperfections or flaws that have been altered in some manner to enhance their appearance, have been available in the jewelry industry for the past several decades and are generally less expensive than diamonds of similar size, cut, and color that have not been altered. Synthetic diamonds are also available in the marketplace and are produced for jewelry applications available to consumers. We have seen a recent emergence of new manufacturers of lab-grown diamonds that offer a product directly competitive with natural diamond; however, they are priced just below that of natural diamond, and therefore compete with *Charles & Colvard Created Moissanite*[®] at a much higher price point. Although we believe that colorless gemstone-quality synthetic and treated diamonds presently cannot be produced at prices competitive with those currently offered for our moissanite jewels, there can be no assurance that such competitive prices cannot be achieved in the future by the producers of either or both synthetic and treated diamonds. The primary producers of synthetic diamonds used for industrial applications are DeBeers and Sumitomo. There are also a number of Russian producers of synthetic diamonds for industrial uses. In addition, companies such as Chatham, Diamond Foundry, and Scio Diamond Technology Corporation are synthesizing diamonds in limited quantities, limited carat sizes, and in limited ranges of color. Synthetic diamond films can be grown at commercially viable prices in thicknesses that can be applied to various surfaces such as other synthetic materials.

The global diamond market is in excess of \$80 billion in annual sales. Assuming 10% of the global diamond jewelry market is interested in lab-grown and alternative diamond stones, then the addressable market is \$8 billion, with US and China making up over half of the market opportunity. As lab-grown diamonds continue to garner attention and raise awareness for alternatives to mined diamonds, but are relatively expensive, we believe our unique moissanite jewels have a great opportunity in this market.

Although we believe that our moissanite jewels have a proprietary position, we could face competition from other companies that develop competing SiC technologies. Some of these technologies could be developed by producers of SiC used for other industrial applications. Manufacturers of industrial SiC products include The Carborundum Corporation (currently for abrasive uses); and Cree, Siemens AG, Norstel, Bridgestone, ABB, Dow Chemical, SiC Crystal AG, and Northrop Grumman Corporation (currently for semiconductor uses). We believe that Cree is currently the only supplier of SiC crystals in colors, sizes, and volumes that are suitable for gemstone applications. It is possible, however, that these or other producers of SiC could develop SiC crystals suitable for gemstone applications and produce moissanite jewels unless we could obtain judicial enforcement of our remaining patent rights. It is also possible that such competition could emerge in geographic territories where we do not currently have patent protection. However, we know how challenging it is to create high-quality moissanite and anticipate it will take emerging providers significant time and investment to bring meaningful and competitive products to market. As we experienced ourselves, we anticipate it will take these new providers significant time to evolve from producing low-end moissanite to delivering high-quality gemstones in the colorless or near-colorless range. Achieving the capacity to consistently produce a high-quality moissanite product at mass scale requires a careful balance of silicon carbide-specific faceting skills and a well-tuned global supply chain. Therefore, we do not anticipate direct moissanite competition in the colorless grade D-E-F or near-colorless G-H-I grade ranges for some time to come.

We may also, to a lesser degree, face competition from existing diamond simulants and other synthetic gemstones, including cubic zirconia. Producers and sellers of these products may see the markets for these products being eroded by the market penetration of our moissanite jewels. We believe that the substantially lower price of these products is the primary basis upon which they will compete with our moissanite jewels; however, they are not considered fine jewelry products.

Finished jewelry

The global fine jewelry market competition is fierce. Such well-known jewelry designers and manufacturers as David Yurman, Tacori, Harry Winston, Tiffany & Co., and Pandora, among others, have a variety of jewelry collections featuring diamond and other precious and semi-precious gemstones, and enjoy strong brand recognition and a loyal consumer following. These companies also have greater financial resources than we do to develop and market their products.

We intend to expand our market share and compete with these well-known brands primarily on the basis of the combination of quality, design, and value, as moissanite is the highest quality, affordable alternative available to more expensive gemstones such as diamond. We believe that focusing on the clear advantages in its retail price points, especially in the one-carat and larger sizes, will provide a key point of differentiation and value proposition to the end consumer who may not have had the opportunity to previously purchase fine jewelry due to limitations in discretionary spending income.

In addition, we believe that the *Charles & Colvard Created Moissanite*[®] brand, in addition to other brands for both the moissanite jewels, including *Forever One*[™], and moissanite finished jewelry that we are developing pursuant to our marketing programs, may create a long-term competitive advantage for our products as we build brand recognition. We endeavor to partner with recognized designers and jewelry companies, in addition to developing our own proprietary brands of finished jewelry. While our finished jewelry business is still developing, our goal is to build multiple strong brands sought after by the end consumer. We propose to focus our marketing efforts on emphasizing our attractive designs, coupled with moissanite's exceptional brilliance, fire, durability, and rarity, to establish moissanite as a primary consumer choice in fine jewelry.

Our design, manufacture and marketing of finished jewelry featuring moissanite under exclusive brands for sale at wholesale to distributors and retailers and at retail to end consumers through our charlesandcolvard.com e-commerce sales channel may result in some of our current wholesale customers perceiving us as a competitor, despite our efforts to use primarily non-conflicting sales channels. As we continue to develop our finished jewelry business, we intend to increase distribution through new and existing channels similarly to how many other companies have executed cross-channel marketing and distribution strategies. Due to the size of the finished jewelry market, we believe that such sales channels can co-exist, with the overall end result being increased consumer and brand awareness of moissanite products and a corresponding increased demand for not only our products, but those of our distributor and manufacturer customers as well.

Government Regulation

We are subject to governmental regulations in the manufacture and sale of moissanite jewels and finished jewelry. In particular, the Federal Trade Commission, or FTC, has issued regulations and guidelines governing the marketing of synthetic gemstones and other gemstones similar to diamond that require such gemstones to be clearly identified in any promotional or marketing materials. In addition, the precious metal in our finished jewelry may be subject to requirements, which vary by country and by state, such as hallmarking and alloy content. While we have a policy to ensure compliance with applicable regulations, if our actions are found to be in violation of FTC or other governmental regulations, we may be required to suspend marketing of our products and could incur significant expenses in developing new marketing strategies and materials that would not violate FTC regulations.

Research and Development

We invested approximately \$2,900 in research and development during 2016 compared to \$18,000 in 2015 primarily for the study of product enhancement and manufacturing process efficiencies.

Employees

As of March 6, 2017, we had a total of 69 employees, 65 of which were full-time and four of which were part-time. None of our employees are represented by a labor union. We believe that our employee relations are good.

Directors and Executive Officers of Charles & Colvard, Ltd.

The members of our current Board of Directors are the following:

Neal Goldman

Executive Chairman of the Board; President of Goldman Capital Management, Inc., an investment advisory firm.

Anne M. Butler

Chief Executive Officer of Butler Advisors, a consulting firm specializing in strategic and operational advising to private equity, venture capital, and institutional investors on direct selling acquisitions and management.

Jaqui Lividini

Chief Executive Officer and Founding Partner of Lividini & Co., a brand strategy company that specializes in brand development and marketplace positioning, engagement marketing, and retail strategy.

Suzanne Miglucci

President and Chief Executive Officer of Charles & Colvard, Ltd.

Ollin B. Sykes

President of Sykes & Company, P.A., a regional accounting firm specializing in accounting, tax, and financial advisory services.

Our current executive officers are the following:

Suzanne Miglucci

President and Chief Executive Officer

Clint J. Pete

Interim Chief Financial Officer

Available Information

Our corporate information is accessible through our Internet website at www.charlesandcolvard.com. We are not including the information contained on our website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. We make available, free of charge, access on our website to all reports we file with, or furnish to, the SEC, including our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. A copy of this Annual Report on Form 10-K and our other reports is available without charge upon written request to Investor Relations, Charles & Colvard, Ltd., 170 Southport Drive, Morrisville, North Carolina 27560.

Item 1A. Risk Factors

We operate in a dynamic and rapidly changing business environment that involves substantial risk and uncertainty, and these risks may change over time. The following discussion addresses some of the risks and uncertainties that could cause, or contribute to causing, actual results to differ materially from expectations. In evaluating our business, you should pay particular attention to the descriptions of risks and uncertainties described below. If any of these risks actually occur, our business, financial condition, or results of operations could be materially and adversely affected.

Our future financial performance depends upon increased consumer acceptance, growth of sales of our products, and operational execution of our strategic initiatives. We believe that most consumers are not generally aware of the existence and attributes of moissanite jewels and that the consumer market for moissanite jewels and finished jewelry featuring moissanite remains in the early stages of development. Total moissanite jewelry retail sales have historically been less than 1% of the total jewelry market. The degree of future market acceptance and demand is subject to a significant amount of uncertainty. Our future financial performance will depend, in part, upon greater consumer acceptance of moissanite jewels as an ethically-sourced, affordable, luxurious alternative to other gemstones, such as diamond and our ability to develop brands and execute strategic initiatives, in particular, our direct-to-consumer e-commerce business, to grow our sales and operating income. As we execute our strategy to build and reinvest in our businesses, significant expenses and investment of cash will be required ahead of the revenue streams we expect in the future, and this may adversely affect our operating income. If we are unable to execute and achieve desired revenue levels, we may adjust our strategic initiatives in response to the results of our investments.

In addition, consumer acceptance may be affected by retail jewelers' and jewelry manufacturers' acceptance of moissanite jewels and finished jewelry featuring moissanite. The quality, design, and workmanship of the jewelry settings, whether manufactured by us or other manufacturers, could affect both consumers' perception and acceptance of our jewels and costs incurred by returns and markdowns.

Thus, our future financial performance may be affected by:

- our ability to understand the consumer market segment and effectively market to them a compelling value proposition that leads to converted customers;
- our ability to reach consumers through traditional and digital channels in order to gain interest in moissanite jewels and jewelry;
- our continued success in developing and promoting brands for our moissanite jewels and finished jewelry featuring moissanite, resulting in increased interest and demand for moissanite jewelry at the consumer level;
- the continued willingness and ability of our jewelry distributors and other jewelry suppliers, manufacturers, and designers to market and promote *Charles & Colvard Created Moissanite*[®] to the retail jewelry trade;
- the continued willingness of distributors, retailers, and others in the channel of distribution to purchase loose *Charles & Colvard Created Moissanite*[®], and the continued willingness of manufacturers, designers, and retail jewelers to undertake setting of the loose jewels;
- our continued ability and the ability of manufacturers, designers, and retail jewelers to select jewelry settings that encourage consumer acceptance of and demand for our moissanite jewels and finished jewelry;
- our continued ability and the ability of jewelry manufacturers and retail jewelers to set loose moissanite jewels in finished jewelry with high-quality workmanship;

- our continued ability and the ability of retail jewelers to effectively market and sell finished jewelry featuring moissanite to consumers; and
- our ability to operationally execute our direct-to-consumer e-commerce business.

We are currently substantially dependent on a limited number of distributors, jewelry manufacturers, and retailers for the sale of our products. The majority of the moissanite jewels and finished jewelry featuring moissanite that we sell are distributed through a limited number of distributors, manufacturers, and retailers and, therefore, we are substantially dependent upon these companies for distribution of our products. During 2016, our three largest customers, two of which are loose jewel and finished jewelry distributors and one of which is a television shopping network which carries loose jewel and finished jewelry, collectively accounted for 45% of net sales. As we continue to build our finished jewelry business, we anticipate in the near term that the majority of the moissanite jewels and finished jewelry featuring moissanite that we sell will continue to be to a limited number of manufacturers, distributors, and retailers.

The execution of our business plans could significantly impact our liquidity. The execution of our business plans to expand our direct-to-consumer distribution channels and to create required inventory of our *Forever One™* jewels requires significant investments, which may reduce our cash position. Should we fail to execute on our business plans, we could see delays in the return of cash from our investments, resulting in a liquidity shortfall. Under the \$10,000,000 asset-based revolving credit facility, or the Credit Facility, that we obtained from Wells Fargo, National Association, or Wells Fargo, on June 25, 2014, failure to conduct our business as conducted on the date we obtained the Credit Facility, failure to make required payments to third parties, or failure to comply with the other covenants and defaults contained in the Credit Facility, including a covenant to maintain at least \$1,000,000 in excess availability (as defined under the Credit Facility), could restrict our ability to draw on the Credit Facility. If we are not able to take advances against the Credit Facility, our cash and cash equivalents and other working capital may be insufficient to meet our working capital and capital expenditure needs. In addition, the Credit Facility matures on June 25, 2017 and there is no guarantee for extension or renewal.

Our business and our results of operations could be materially adversely affected as a result of our inability to fulfill orders on a timely basis. As sales of our loose moissanite jewels increase, including our *Forever Brilliant®* and *Forever One™* jewels, availability of certain shapes and sizes may be at risk. In addition, finished jewelry has a large variety of styles of which we maintain on-hand stock for such basic designs as stud earrings, solitaire and three-stone rings, pendants, and bracelets; and make-to-order under strict deadlines for certain wholesale and direct-to-consumer e-commerce customers. We must adequately maintain relationships, forecast demand, and operate within the lead times of third parties that facet and/or enhance the jewels and manufacture the finished jewelry setting to ensure adequate on-hand quantities and/or the shipment of customer orders in a timely manner as we transition certain customers from *Forever Brilliant®* to *Forever One™*. In addition, we are currently dependent on a limited number of vendors for all of the faceting of our loose jewels. If any or all of these vendors were to cancel their arrangements with us, we could experience a disruption in our operations and incur additional costs to procure faceting services from a replacement vendor. The inability to fulfill orders on a timely basis and within promised customer deadlines could result in a cancellation of the orders and loss of customer goodwill that could materially and adversely affect our business, results of operations, and financial condition.

The financial difficulties or insolvency of one or more of our major customers or their lack of willingness and ability to market our products could adversely affect results. We are subject to a concentration of credit risk amongst our major customers (some of whom are distributors), and a default by any of these customers on their debts to us could have a material adverse effect on our financial position. Future sales and our ability to collect accounts receivable depend, in part, on the financial strength of our customers and our distributors' willingness and ability to successfully market our products. We estimate an allowance for accounts for which collectability is at risk and this allowance adversely impacts profitability. In the event customers experience greater than anticipated financial difficulties, insolvency, or difficulty marketing products, we expect profitability to be adversely impacted by our failure to collect accounts receivable in excess of the estimated allowance. In these circumstances, we may demand the return of product sold to such customers, resulting in an increase in inventory and a reduction in accounts receivable. Given the current economic environment, constrained access to capital and general market contractions may heighten our exposure to customer default and lower than expected distributor sales.

We expect to remain dependent upon the Supply Agreement with Cree for the sole supply of our SiC crystals for the foreseeable future. If we are unable to obtain sufficient, high-quality SiC crystals from Cree and we have a significant increase in demand for our moissanite jewels, then we may not be able to meet that demand. Cree has

certain proprietary rights relating to its process for growing large single crystals of SiC and its process for growing near-colorless SiC crystals. Under the Supply Agreement, subject to certain terms and conditions, we agreed to exclusively purchase from Cree, and Cree agreed to exclusively supply, 100% of our required SiC materials in quarterly installments that must equal or exceed a set minimum order quantity. The initial term of the Supply Agreement will expire on June 24, 2018, unless extended by the parties. We also have one option to unilaterally extend the term of the agreement for an additional two-year period, subject to certain conditions. Our total purchase commitment under the Supply Agreement until June 2018 is dependent upon the size of the SiC material and ranges between approximately \$29.6 million and approximately \$31.5 million. However, there can be no assurance that Cree will be able to continue to produce and supply us with SiC crystals of sufficient quality, sizes, and volumes that we desire or that we will successfully negotiate future purchase commitments at acceptable prices that enable us to manage our inventories and raw material costs effectively.

We face intense competition in the worldwide jewelry industry. The jewelry industry is highly competitive and we compete with numerous other jewelry products. In addition, we face competition from treated diamonds, synthetic diamonds, lab-grown diamonds, other moissanite jewels, and companies developing other synthetic jewelry technologies. A substantial number of companies supply products to the jewelry industry, many of which we believe have greater financial resources than we do. Competitors could develop new or improved technologies that may render the price point for moissanite noncompetitive, which would have an adverse effect on our business, results of operations, and financial condition.

In addition, we have relied on our patent rights and other intellectual property rights to maintain our competitive position. Our current U.S. product and method patents for moissanite jewels expired in 2015 and most of our patents in foreign jurisdictions expired in 2016 with only Mexico remaining (which expires in 2021). As a result, we anticipate new providers of moissanite will enter the market. However, because the process of creating high-quality moissanite is challenging, we believe it will take emerging providers significant time and investment to bring meaningful and competitive products to market. As we experienced ourselves, we anticipate it will take these new providers significant time to evolve from producing low-end moissanite to delivering high-quality gemstones in the colorless or near-colorless range. Achieving the capacity to consistently produce a high-quality moissanite product at mass scale requires a careful balance of silicon carbide-specific faceting skills and a well-tuned global supply chain. Therefore, we do not anticipate direct moissanite competition in the colorless grade D-E-F or near-colorless grade G-H-I ranges for some time to come. If, however, we are unable to successfully build strong brands for our moissanite jewels and finished jewelry featuring moissanite or competition grows faster than expected, we may not have commercially meaningful protection for our products or a commercial advantage against our competitors or their competitive products or processes, which may have a material adverse effect on our business, results of operations, and financial condition.

The resignation of our Chief Financial Officer and the departure of our Chief Revenue Officer create uncertainties and could impact our business. Effective December 2, 2016, Kyle S. Macemore resigned as our Senior Vice President and Chief Financial Officer; Clint J. Pete, our current Corporate Controller, was appointed to serve as our Interim Chief Financial Officer effective upon Mr. Macemore's resignation. In addition, effective January 10, 2017, Steve Larkin, our Chief Revenue Officer, is no longer with the Company. The Company's ability to execute its business strategies may be adversely affected by the uncertainty associated with these transitions.

Leadership transitions can be inherently difficult to manage and may cause uncertainty and decreased productivity among our employees and increase the likelihood of turnover, which could result in significant disruptions to our operations. We could be adversely affected if we fail to adequately plan for the succession of members of our senior management team should we have additional departures. In addition, these management transitions inherently cause some loss of institutional knowledge, which can negatively affect strategy and execution, and our results of operations and financial condition could suffer as a result. Finally, we continue to execute a number of significant business initiatives. Successfully managing these initiatives, including retention of key employees, is critical to our business success.

Sales of our common stock by Mr. Larkin may cause the market price of our common stock to decrease. As previously noted, Steve Larkin, our Chief Revenue Officer, is no longer with our company, effective as of January 10, 2017. Upon Mr. Larkin's departure, he held 279,957 shares of common stock and options exercisable for 150,000 shares of common stock. Mr. Larkin has the ability, subject to applicable securities laws, to sell all or a portion of his currently held common stock and any shares of common stock he obtains through the exercise of in-

the-money stock options to provide liquidity or to diversify his investments. If he does sell his common stock into the market, these sales may cause the market price of our common stock to decrease.

Our failure to maintain compliance with NASDAQ's continued listing requirements could result in the delisting of our common stock. Our common stock is currently listed on the NASDAQ Global Select Market. In order to maintain this listing, we must satisfy minimum financial and other requirements. In the past, we have received a notification letter from NASDAQ indicating that we were not in compliance with listing requirements because the minimum bid price of our common stock closed below \$1.00 per share for 30 consecutive business days. However, NASDAQ subsequently notified us that we had regained compliance with the minimum bid price requirement. If we fail to satisfy NASDAQ's listing requirements in the future, we expect to take actions to regain compliance, but we can provide no assurance that any such action would prevent our common stock from dropping below the NASDAQ minimum bid price requirement or prevent future non-compliance with NASDAQ's listing requirements. If our common stock is delisted from NASDAQ, the delisting could substantially decrease trading in our common stock and adversely affect the market liquidity of our common stock; adversely affect our ability to obtain financing on acceptable terms, if at all; and may result in the potential loss of confidence by investors, suppliers, customers, and employees and fewer business development opportunities. Additionally, the market price of our common stock may decline further and shareholders may lose some or all of their investment.

Our current wholesale customers may potentially perceive us as a competitor in the finished jewelry business. As described above, we are currently substantially dependent on a limited number of customers, including distributors and jewelry manufacturers, for the sale of our products. Our design, manufacture, and marketing of finished jewelry featuring moissanite under exclusive brands for sale to distributors and retailers may result in some of these current customers perceiving us as a competitor, despite our efforts to use primarily non-conflicting sales channels. In response, these customers may choose to reduce their orders for our products. This reduction in orders could occur faster than our sales growth in this business, which could materially and adversely affect our business, results of operations, and financial condition.

We may experience quality control challenges from time to time that can result in lost revenue and harm to our brands and reputation. Part of our strategy for success is to establish Charles & Colvard with reputable, high-quality, and sophisticated brands. The achievement of this goal depends in large part on our ability to provide customers with high-quality moissanite and finished jewelry featuring moissanite. Although we take measures to ensure that we sell only the best quality products, we may face quality control challenges, which could impact our competitive advantage. There can be no assurance we will be able to detect and resolve all quality control issues prior to shipment of products to our distributors, manufacturers, retailers, and end consumers. Failure to do so could result in lost revenue, lost customers, significant warranty and other expenses, and harm to our reputation.

Our business and our results of operations could be materially adversely affected as a result of general economic and market conditions. Our business, including our sales volumes and overall profitability, could be adversely impacted by disruptions in global financial markets, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increased unemployment rates, and uncertainty about economic stability. We are unable to predict the likely duration and severity of the effects of these disruptions in the financial markets and the adverse global economic conditions, and if economic conditions deteriorate, our business and results of operations could be materially and adversely affected. The consequences of such adverse effects could include interruptions or delays in our suppliers' performance of our contracts, reductions and delays in customer purchases, delays in or the inability of customers to obtain financing to purchase our products, and bankruptcy of customers and/or suppliers.

Luxury products, such as fine jewelry, are discretionary purchases for consumers. Recessionary economic cycles, higher interest rates, higher fuel and energy costs, inflation, levels of unemployment, conditions in the residential real estate and mortgage markets, access to credit, consumer debt levels, unsettled financial markets, and other economic factors that may affect consumer spending or buying habits could materially and adversely affect demand for our products. In addition, volatility in the financial markets has had and may continue to have a negative impact on consumer spending patterns. A reduction in consumer spending or disposable income may affect us more significantly than companies in other industries and could have a material adverse effect on our business, results of operations, and financial condition.

We are subject to certain risks due to our international distribution channels and vendors. We currently have over 20 international distributors for moissanite jewels covering portions of Western Europe, Australia, India, Southeast

Asia, and the Middle East. In addition, we use certain companies based outside the U.S. to facet our moissanite jewels and to manufacture finished jewelry. Due to our reliance on development of foreign markets and use of foreign vendors, we are subject to the risks of conducting business outside of the U.S. These risks include the following:

- the adverse effects on U.S.-based companies operating in foreign markets that might result from war; terrorism; changes in diplomatic, trade, or business relationships; or other political, social, religious, or economic instability;
- the continuing adverse economic effects of any global financial crisis;
- unexpected changes in, or impositions of, legislative or regulatory requirements;
- delays resulting from difficulty in obtaining export licenses;
- tariffs and other trade barriers and restrictions;
- the burdens of complying with a variety of foreign laws and other factors beyond our control;
- the potential difficulty of enforcing agreements with foreign customers and suppliers; and
- the complications related to collecting receivables through a foreign country's legal system.

Additionally, while all of our foreign transactions are denominated in U.S. dollars, foreign currency fluctuations could impact demand for our products or the ability of our foreign suppliers to continue to perform. Further, some of our foreign distributors operate relatively small businesses and may not have the financial stability to assure their continuing presence in their markets. There can be no assurance that the foregoing factors will not adversely affect our operations in the future or require us to modify our anticipated business practices.

Our operations could be disrupted by natural disasters. We conduct substantially all of our activities, including executive management, manufacturing, packaging, and distribution activities, at one North Carolina location. Although we have taken precautions to safeguard our facility, including obtaining business interruption insurance, any future natural disaster, such as a hurricane, flood or fire, could significantly disrupt our operations and delay or prevent product shipment during the time required to repair, rebuild or replace our facility, which could be lengthy and result in significant expenses. Furthermore, the insurance coverage we maintain may not be adequate to cover our losses in any particular case or continue to be available at commercially reasonable rates and terms. In addition, the vendors that perform all of the faceting of our loose moissanite jewels are located in regions that are susceptible to tsunamis, flooding, and other natural disasters that may cause a disruption in our vendors' operations for sustained periods and the loss or damage of our work-in-process inventories located at such vendors' facilities. Damage or destruction that interrupts our ability to deliver our products could impair our relationships with our customers. Prolonged disruption of our services as a result of a natural disaster may result in product delivery delays, order cancellations, and loss of substantial revenue, which could materially and adversely affect our business, results of operations, and financial condition.

Sales of moissanite jewelry could be dependent upon the pricing of precious metals, which is beyond our control. Any increases in the market price of precious metals (primarily gold) could affect the pricing and sales of jewelry incorporating moissanite jewels, including jewelry manufactured by us. The majority of price increases in precious metals are passed on to the end consumer in the form of higher prices for finished jewelry. These higher prices could have a negative impact on the sell-through of moissanite jewelry at the retail level. From the beginning of 2006 through 2016, the price of gold has increased significantly (approximately 117%), resulting in higher retail price points for gold jewelry. This has had a negative impact on both sales of moissanite jewelry and the jewelry industry as a whole.

Seasonality of our business may adversely affect our net sales and operating income. Sales in the retail jewelry industry are typically seasonal due to increased consumer purchases during the holiday season. Because historically we have primarily sold our loose jewels and finished jewelry featuring moissanite at wholesale to distributors, manufacturers, and retailers, our sales to support the holiday season largely have taken place during the third and beginning of the fourth calendar quarters, depending on the sales channel and the level of advance planning and production our customers undertook. As sales of our finished jewelry featuring moissanite to retailers and directly to consumers increase, both in dollars and as a percentage of total sales, our fourth quarter results may depend upon the general level of retail sales during the holiday season as well as general economic conditions and other factors beyond our control. In anticipation of increased sales activities during the fourth quarter, we may incur significant additional expenses, including higher inventory of finished jewelry in the second half of the year. In recent years, excluding one-time sales events, we have experienced a higher degree of seasonality in the fourth quarter than we have experienced in prior years primarily as a result of the holiday season sales to end consumers through our direct-

to-consumer e-commerce website, charlesandcolvard.com and as a result of increased sales through televised home shopping networks within our wholesale distribution segment. Our quarterly results of operations may continue to fluctuate as a result of a number of factors, including seasonal cycles, the timing of new product introductions, the timing of orders by our customers, and the mix of product sales demand, and these factors may significantly affect our results of operations in a given quarter.

We may not be able to adequately protect our intellectual property, which could harm the value of our products and brands and adversely affect our business. We rely primarily on patent, copyright, trademark, and trade secret laws, as well as confidentiality procedures and contractual restrictions, to establish and protect our proprietary rights, all of which provide only limited protection. We had U.S. product and method patents for moissanite jewels, which expired in August 2015, under which we believed that we had broad, exclusive rights to manufacture, use, and sell moissanite jewels in the U.S. We had these same patents in 25 foreign jurisdictions primarily across Asia and Europe that expired in the third quarter of 2016, and will expire in Mexico in 2021. However, our patent expirations could enable competitors and other businesses to duplicate and market a similar product and enter the marketplace. Without patent protection, we must rely primarily on our branding strategy and the Supply Agreement under which Cree supplies SiC crystals exclusively to us, as well as confidentiality procedures, to protect our proprietary rights, which may or may not be sufficient. In addition, at the present time, we are dependent on Cree's technology for the production of SiC crystals. There can be no assurance that any patents issued to or licensed by or to us will provide any significant commercial protection, that we will have sufficient resources to protect our respective patents and proprietary rights, that any additional patents will be issued in the future, or that any existing or future patents will be upheld by a court should we seek to enforce our rights against an infringer. At this point, we cannot reasonably estimate the impact these patent expirations will have on our future results of operations.

The existence of valid patents does not prevent other companies from independently developing competing technologies. Existing producers of SiC crystals or others may refine existing processes for growing SiC crystals or develop new technologies for growing large single crystals of SiC or colorless SiC crystals in a manner that does not infringe any patents issued to or licensed by or to us. Accordingly, existing and potential competitors may be able to develop products that are competitive with or superior to our products, and such competition could have a material adverse effect on our business, results of operations, and financial condition.

In addition, we have certain trademarks and pending trademark applications that support our moissanite branding strategy, and we use certain brand names for which we do not currently have proprietary rights. The success of our growth strategy may depend on our continued ability to use our existing brand names in order to increase consumer awareness and further develop strong brands around our moissanite jewels and finished jewelry collections. We cannot assure that any future trademark or other registrations will be issued for pending or future applications or that we will be able to obtain licenses or other contractual rights to use brand names that may infringe the proprietary rights of third parties. We also cannot assure that any registered or unregistered trademarks or other intellectual property or contractual rights will be enforceable or provide adequate protection of our proprietary rights. Our inability to secure proprietary protection with respect to our brands could have a material adverse effect on our business, results of operations, and financial condition.

We also cannot be certain that our products and brand names do not or will not infringe valid patents, trademarks, and other intellectual property rights held by third parties. We may be subject to legal proceedings and claims from time to time relating to the intellectual property of others in the ordinary course of our business. Litigation to determine the validity of any third party's claims could result in significant expense and divert the efforts of our technical and management personnel, whether or not such litigation is determined in our favor. In the event of an adverse result of any such litigation, we could be required to expend significant resources to develop non-infringing technology or to obtain licenses for, and pay royalties on the use of, the technology subject to the litigation. We have no assurance that we would be successful in such development or that any such license would be available on commercially reasonable terms.

A failure of our information technology (IT) infrastructure or a failure to protect confidential information of our customers and our network against security breaches could adversely impact our business and operations. We rely upon the capacity, reliability, and security of our information technology infrastructure and our ability to expand and continually update this infrastructure in response to the changing needs of our business. For example, we implemented new IT systems and payment gateways that support our wholesale and charlesandcolvard.com e-commerce businesses. As we implement and integrate new systems, or de-integrate systems, they may not perform as expected. We also face the challenge of supporting our older systems and implementing necessary upgrades. If

we experience a problem with the functioning of an important IT system or a security breach of our IT systems, the resulting disruptions could have an adverse effect on our business.

In addition, we and certain of our third-party vendors receive and store personal information associated with our sales operations and other aspects of our business. In connection with our e-commerce business, we rely on encryption and authentication technology licensed from third parties to effect secure transmission of confidential information, including credit card numbers. Despite our implementation of security measures, our IT systems and e-commerce business are vulnerable to damages from computer viruses, natural disasters, unauthorized access, cyber-attack, and other similar disruptions. An increasing number of websites and Internet companies have reported breaches of their security. Any such compromise of our security could damage our reputation, business, and brand and expose us to a risk of loss or litigation and possible liability, which could substantially harm our business and results of operations. In addition, anyone who is able to circumvent our security measures could misappropriate proprietary information or cause interruptions in our operations, damage our computers or those of our customers, or otherwise damage our reputation and business. These issues are likely to become more difficult as we expand the number of countries in which our e-commerce website operates. We may need to expend significant resources to protect against security breaches or to address problems caused by breaches.

If the e-commerce opportunity changes dramatically or if e-commerce technology or providers change their models, our results of operations may be adversely affected. As we adopt e-commerce as one of our primary selling channels, our business model becomes more reliant on third-party platforms to achieve success. Should our products, product listings, or business not meet the requirements of certain third-party transactional channels such as marketplaces, comparison shopping engines, or social commerce sites, it may affect our ability to meet our revenue targets. Additionally, Amazon, eBay, Jet, Walmart.com, Gemvara, or other desirable e-commerce platforms may decide to make significant changes to their respective business models, policies, systems, or plans, and those changes could impair or inhibit our ability to sell our products through those channels. Further, a significant change in consumer online behavior or introduction of new or disruptive technology could adversely affect overall e-commerce trends and diminish the value of investments we have made in select online channels. Any of these results could cause a significant reduction in our revenue and have a material adverse effect on our results of operations.

If we fail to evaluate, implement, and integrate strategic acquisition or disposition opportunities successfully, our business may suffer. From time to time we evaluate strategic opportunities available to us for product, technology, or business acquisitions or dispositions. If we choose to make acquisitions or dispositions, we face certain risks, such as failure of an acquired business to meet our performance expectations, failure to recognize cost savings from a disposition, diversion of management attention, retention of management and existing customers of our current and any acquired business, and difficulty in integrating or separating a business's operations, personnel, and financial and operating systems. We may not be able to successfully address these risks or any other problems that arise from future acquisitions or dispositions. Any failure to successfully evaluate strategic opportunities and address risks or other problems that arise related to any acquisition or disposition could adversely affect our business, results of operations, and financial condition.

Governmental regulation and oversight might adversely impact our operations. We are subject to governmental regulations in the manufacture and sale of moissanite jewels and finished jewelry. In particular, the FTC has issued regulations and guidelines governing the marketing of synthetic gemstones and other gemstones similar to diamond that require such gemstones to be clearly identified in any promotional or marketing materials. In addition, the precious metal in our finished jewelry may be subject to requirements, which vary by country and by state, such as hallmarking and alloy content. We may be under close scrutiny both by governmental agencies and by competitors in the gemstone industry, any of which may challenge our promotion and marketing of our moissanite jewels and finished jewelry products. While we have a policy to ensure compliance with applicable regulations, if our production or marketing of moissanite jewels and/or finished jewelry is challenged by governmental agencies or competitors, or if regulations are issued that restrict our ability to market our products, our business, results of operations, and financial condition could be materially adversely affected.

Some anti-takeover provisions of our charter documents may delay or prevent a takeover of our company. A number of provisions of our articles of incorporation and bylaws impact matters of corporate governance and the rights of shareholders. Certain of these provisions have an anti-takeover effect and may delay or prevent takeover attempts not first approved by our Board of Directors (including takeovers that certain shareholders may deem to be in their best interests). These provisions also could delay or frustrate the removal of incumbent directors or the assumption of control by shareholders. We believe that these provisions are appropriate to protect our interests and

the interests of all of our shareholders.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

We currently lease approximately 36,350 square feet of office, storage, and light manufacturing space in the Research Triangle Park area of North Carolina from an unaffiliated third-party that is used by both of our current operating and reportable segments.

The majority of all U.S. personnel, including our executive offices, sales offices, administrative personnel, and production facilities are housed in the current space.

Item 3. Legal Proceedings

There are no material pending legal proceedings to which we are a party or to which any of our property is subject.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market for Registrant’s Common Equity

Our common stock is traded on the NASDAQ Global Select Market under the symbol “CTHR.” The following table presents, for the periods indicated, the high and low sales prices of our common stock, as reported by the NASDAQ Global Select Market. As of March 3, 2017 there were 266 shareholders of record of our common stock.

	<u>High</u>	<u>Low</u>
Year Ended December 31, 2015:		
First Quarter	\$1.92	\$1.11
Second Quarter	\$1.68	\$1.15
Third Quarter	\$1.72	\$1.14
Fourth Quarter	\$1.45	\$0.90
Year Ended December 31, 2016:		
First Quarter	\$1.49	\$0.75
Second Quarter	\$1.26	\$0.93
Third Quarter	\$1.33	\$0.85
Fourth Quarter	\$1.23	\$0.83

We did not pay any dividends on our common stock during 2016 or 2015. We will regularly review and consider the best policies and practices for our company, including the dividend policy. The payment of future dividends will be dependent on the facts and circumstances at the time of that review

Item 6. Selected Financial Data

Not applicable.

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

The following discussion is intended to provide a better understanding of our consolidated financial statements, including a brief discussion of our business and products, key factors that impacted our performance, and a summary of our operating results. This information should be read in conjunction with Item 1A, “Risk Factors” and our consolidated financial statements and the notes thereto included in Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K. Historical results and percentage relationships among any amounts in the consolidated financial statements are not necessarily indicative of trends in operating results for future periods.

Overview

We manufacture, market, and distribute *Charles & Colvard Created Moissanite*[®] (which we refer to as moissanite or moissanite jewels) and finished jewelry featuring moissanite for sale in the worldwide jewelry market. Moissanite, also known by its chemical name silicon carbide (SiC), is a rare mineral first discovered in a meteorite crater. Because naturally occurring SiC crystals are too small for commercial use, larger crystals must be grown in a laboratory. Leveraging our advantage of being the original and leading worldwide source of created moissanite jewels, our strategy is to establish Charles & Colvard with reputable, high-quality, and sophisticated brands across multiple channels, and to position moissanite as an ethically-sourced, affordable, and luxurious alternative to other gemstones such as diamond. We believe this is possible due to moissanite’s exceptional brilliance, fire, durability, and rarity like no other jewel available on the market. We sell loose moissanite jewels and finished jewelry at wholesale to distributors, manufacturers, retailers, TV shopping networks, and designers, and at retail to end consumers through our wholly owned operating subsidiaries, charlesandcolvard.com, LLC (formerly Moissanite.com, LLC) and Charles & Colvard Direct, LLC (until March 2016), and through third-party marketplaces. As of September 30, 2016, we changed the name of our wholly owned subsidiary Moissanite.com, LLC to charlesandcolvard.com, LLC.

In February 2016, we made the strategic decision to explore a potential divestiture of our direct-to-consumer home party business previously operated through our Charles & Colvard Direct, LLC (dba *Lulu Avenue*[®]) subsidiary. After careful analysis of our core competencies, go-to-market strategies, and intent to advance toward profitability, the management team and Board of Directors determined a divestiture of this distribution channel to be in our best interest and our shareholders’ best interest. On March 4, 2016, we and Charles & Colvard Direct, LLC entered into an asset purchase agreement with Yanbal, under which Yanbal purchased certain assets related to our direct-to-consumer home party business for \$500,000 and assumed certain liabilities related to such assets. A more detailed description of this transaction is included in Note 12, “Discontinued Operations”, in the Notes to the Consolidated Financial Statements.

As a result of the divestiture of our direct-to-consumer home party business operated through our Charles & Colvard Direct, LLC (dba *Lulu Avenue*[®]) subsidiary, during the three months ended March 31, 2016, we began managing our business primarily through our two continuing distribution channels. Accordingly, for the years ended December 31, 2016 and 2015, our reportable segments are our wholesale distribution channel transacted through our parent entity, and our direct-to-consumer distribution channel transacted through the wholly owned operating subsidiary, charlesandcolvard.com, LLC. We are now presenting the operating results of Charles and Colvard Direct, LLC as a discontinued operation.

We sell our loose moissanite jewels at wholesale to some of the largest distributors and jewelry manufacturers in the world, which mount them into fine jewelry to be sold at retail outlets and via the Internet. We also sell loose moissanite jewels and finished jewelry featuring moissanite at wholesale to retailers, TV shopping networks, and designers to be sold to consumers and directly to consumers through our e-commerce sales channel charlesandcolvard.com and third-party marketplaces. We believe our continued and expanding use of multiple sales channels to the jewelry trade and the end consumer with branded finished jewelry featuring moissanite positions Charles & Colvard goods at the many touchpoints where consumers are when they are making their buying decisions – thereby creating greater exposure for our brand and increasing consumer demand.

2016 was a pivotal year for Charles & Colvard. Acting on our vision which is driven by an ethical promise: “create the world’s most brilliant gem, while leading the way for environmentally and socially responsible choices in the jewelry industry at a revolutionary value,” we embarked on a corporate re-branding initiative designed to position our brand as a premier, consumer-facing purveyor of jewels and fine jewelry. We believe this new brand presence

positions Charles & Colvard with a platform that can support our multi-channel, global expansion strategy. Over the course of the year, we delivered key elements of our strategic plan in support of this new brand roll-out including:

- *Expansion of Forever One™.* Since its limited launch in September 2015, Charles & Colvard's *Forever One™* the world's first colorless moissanite jewel (graded as D-E-F using the Gemological Institute of America's color grading scale), has been met with great enthusiasm from channel partners and consumers. In response to this demand, we expanded our *Forever One™* product line by offering the jewel in an additional color grade (G-H-I), and in more shapes and sizes, including the innovative Asscher cut, which was released in June 2016. *Forever One™* represented more than 55% of all Charles & Colvard loose jewel and finished jewelry sales for the fourth quarter of 2016, and we believe *Forever One™* represents the future of premier moissanite to the market.
- *A move up-market.* With the advent of our colorless jewel, *Forever One™*, came an opportunity for Charles & Colvard to move up-market – competing directly with diamond for share of wallet. We believe the coupling of this amazing jewel with our new brand presence and jewelry line has elevated Charles & Colvard to the ranks of a premium brand. Market acceptance, as evidenced by our growth in the bridal sector, validates our move into what we believe is an underserved “white space” in the fine jewelry sector. To differentiate ourselves from emerging competition and to ensure our customers that they are receiving a reputable and high-quality jewel, each *Charles & Colvard Created Moissanite®* jewel is backed by a Limited Lifetime Warranty and Certificate of Authenticity – our commitment to our customers that their purchase is guaranteed to retain its fire and brilliance forever. With the launch of our new e-commerce website, we now offer expanded warranty coverage on our *Forever One™* jewels to include protection against usage damage to our moissanite gemstones.
- *Expansion of our jewelry line.* Throughout 2016, Charles & Colvard carefully curated a collection of jewelry ranging from bridal to fashion and fine jewelry. While bridal continues to be a large and fast growing category, we believe the introduction of an expanded selection of everyday fashion and fine jewelry positions Charles & Colvard as a brand that appeal to consumers celebrating a multitude of commemorative moments – from birthdays to anniversaries and more – affording Charles & Colvard more opportunities to sell our wares. This broadened collection is now available to our retail and wholesale partners as well as promoted on Charles & Colvard's e-commerce site and third-party transactional websites.
- *Growth within our traditional channels.* Charles & Colvard has enjoyed 20 years of partnership with industry leaders in the wholesale and retail spaces. We believe these traditional channels continue to represent fertile ground for our move up-market. Sales efforts in 2016 delivered growth with existing partners and an expanded footprint into new retail and wholesale channels, supporting 21% overall growth in our wholesale sector.
- *Expansion of our direct-to-consumer e-commerce business.* One of the primary channels that benefitted from our 2016 re-branding effort is our direct-to-consumer e-commerce website, charlesandcolvard.com. In October 2016, we announced the launch of our web presence with a new look and feel, an enhanced user experience, the introduction of our new jewelry line, and a singular and unified presence for our company and brand. We re-platformed our web presence on leading-edge technology that positions us to deliver the latest in consumer shopping experiences to our customers. This agile web platform enables us to iterate and refresh our website with new and innovate functionality as new e-commerce and direct-to-consumer strategies make their way to market. We coupled this new presence with an aggressive digital marketing and awareness strategy that drew interest to our new site, and conversions during the 2016 holiday season. Another critical element of our direct-to-consumer strategy is to provide our products for sale through third party e-commerce channels. We executed on this strategy with the release of Charles & Colvard products on marketplaces including Amazon, eBay, Jet and Walmart.com. Additionally, in August 2016, we announced our partnership with Gemvara, a leading online retailer of customizable fine jewelry, which showcases Charles & Colvard *Forever One™* on its unique, world-class e-commerce platform.
- *A laser focus on millennials.* Millennials are the largest age group in U.S. history, and they are moving into their prime spending years. Millennials proactively seek out goods and services that align with their core principles, and become devoted and vocal advocates of brands that embody ‘green’ practices. Our socially responsible and ethically-sourced products align directly with the principles and purchasing

preferences of the millennial, and our quality and price point offer unprecedented value to the cost-conscious millennial. Throughout 2016, we proactively engaged this market through a multi-channel traditional and digital marketing strategy that we believe has meaningfully increased the awareness of our brand as evidenced through our increased social media following, multiple public relations postings and newfound interaction with this important customer segment.

As we execute our strategy to build and reinvest in our businesses, significant expenses and investment of cash will be required ahead of the revenue streams we expect in the future, and this resulted in some unprofitable reporting periods in 2015 and 2016. Despite this, we have maintained as one of our primary goals to generate positive cash flow from continuing operations to protect our cash position. We were successful in achieving this goal during 2015 and 2016 as we were able to reduce our inventories and aggressively collect on our trade accounts receivable balances. We will continue to monitor our cash burn rate and collection efforts as we grow the business.

Our total consolidated net sales for the year ended December 31, 2016 of \$29.17 million were 14% greater than total consolidated net sales during the year ended December 31, 2015. Wholesale distribution segment net sales for the year ended December 31, 2016 of \$24.53 million were 21% higher than wholesale distribution segment net sales during the year ended December 31, 2015. Direct-to-consumer e-commerce distribution segment net sales for the year ended December 31, 2016 of \$4.64 million were 15% lower than direct-to-consumer e-commerce distribution segment net sales during the year ended December 31, 2015, primarily due to the reduction in discount sales and the migration to our new web presence on charlesandcolvard.com.

Loose jewel sales comprised 74% of our total consolidated net sales for the year ended December 31, 2016 and increased 42% to \$21.45 million, compared with \$15.11 million in the previous year. Finished jewelry sales comprised 26% of our total consolidated net sales and decreased 27% to \$7.72 million, compared with \$10.58 million in the previous year.

Operating expenses from continuing operations increased by \$889,000, or 7.5%, to \$12.70 million in 2016 from \$11.81 million in 2015. Of this increase, sales and marketing expenses increased \$1.27 million, or 22%, to \$7.04 million, primarily as a result of costs associated with implementing our new sales and marketing strategies, including the launch of our new website. General and administrative expenses decreased \$487,000, or 8%, to \$5.54 million primarily as a result of decreased personnel expenses and temporary labor expenses partially offset by an increase in certain fees associated with our Credit Facility. Loss on abandonment of assets increased \$118,000, or 100%, for the year ended December 31, 2016, compared to \$0 in the previous year, as we abandoned costs of construction in progress related to website branding and design for our direct-to-consumer e-commerce business, charlesandcolvard.com, due to a change in our corporate strategy to consolidate our web properties.

We recorded a net loss of \$4.53 million, or \$0.22 per diluted share, for the year ended December 31, 2016, compared to a net loss of \$9.57 million in the previous year. The decreased net loss was primarily due to the discontinuance of our direct-to-consumer home party business and an increased gross profit margin on greater net sales as we implement our new sales and marketing strategies. These improvements were partially offset by the increased operating expenses. We recorded a net loss from continuing operations of \$3.95 million for the year ended December 31, 2016, compared to a net loss from continuing operations of \$5.09 million in the previous year.

The execution of our strategy to grow our company, with the ultimate goal of increasing consumer awareness and clearly communicating the value proposition of moissanite, is challenging and not without risk. As such, there can be no assurance that future results for each reporting period will exceed past results in sales, operating cash flow, and/or net income due to the challenging business environment in which we operate and our investment in various initiatives to support our growth strategies. However, as we execute our growth strategy and messaging initiatives, we remain committed to our current priorities of generating positive cash flow and strengthening our financial position while both monetizing our existing inventory and manufacturing our created moissanite loose jewels and finished jewelry featuring moissanite to meet sales demand. We believe the results of these efforts will propel our revenue growth and profitability and further enhance shareholder value in coming years, but we fully recognize the business and economic challenges that we face.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which we prepared in accordance with accounting principles generally accepted in the United States, or U.S. 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 disclosures of contingent assets and liabilities. “Critical accounting policies and estimates” are defined as those most important to the financial statement presentation and that require the most difficult, subjective, or complex judgments. We base our estimates on historical experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Under different assumptions and/or conditions, actual results of operations may materially differ. The most significant estimates impacting our consolidated financial statements relate to valuation and classification of inventories, accounts receivable reserves, deferred tax assets, uncertain tax positions, and revenue recognition. We also have other policies that we consider key accounting policies, but these policies typically do not require us to make estimates or judgments that are difficult or subjective.

Inventories - Inventories are stated at the lower of cost or market on an average cost basis. Inventory costs include direct material and labor, inbound freight, purchasing and receiving costs, inspection costs, and warehousing costs. Any inventory on hand at the measurement date in excess of our current requirements based on historical and anticipated levels of sales is classified as long-term on our consolidated balance sheets. Our classification of our inventory as either short- or long-term inventory requires us to estimate the portion of on-hand inventory that can be realized over the next 12 months and does not include precious metal, labor, and other inventory purchases expected to be both purchased and realized in cost of goods sold over the next 12 months.

Our work-in-process inventories include raw SiC crystals on which processing costs, such as labor and sawing, have been incurred and components, such as metal castings and finished good moissanite jewels, that have been issued to jobs in the manufacture of finished jewelry. Our moissanite jewel manufacturing process involves the production of intermediary shapes, called “preforms,” that vary depending upon the size and shape of the finished jewel. To maximize manufacturing efficiencies, preforms may be made in advance of current finished inventory needs but remain in work-in-process inventories. As of December 31, 2016 and December 31, 2015, work-in-process inventories issued to active production jobs approximated \$7.18 million and \$3.02 million, respectively.

The need for adjustments to inventory reserves is evaluated on a period-by-period basis.

Accounts Receivable Reserves - Estimates are used to determine the amount of two reserves against trade accounts receivable. The first reserve is an allowance for sales returns. At the time revenue is recognized, we estimate future returns using a historical return rate that is reviewed quarterly with consideration of any contractual return privileges granted to customers, and we reduce sales and trade accounts receivable by this estimated amount. The allowance for sales returns was \$415,000 and \$731,000 at December 31, 2016 and 2015, respectively.

The second reserve is an allowance for doubtful accounts for estimated losses resulting from the failure of our customers to make required payments. This allowance reduces trade accounts receivable to an amount expected to be collected. Based on historical percentages of uncollectible accounts by aging category, changes in payment history, and facts and circumstances regarding specific accounts that become known to management when evaluating the adequacy of the allowance for doubtful accounts, we determine a percentage based on the age of the receivable that we deem uncollectible. The allowance is then calculated by applying the appropriate percentage to each of our accounts receivable aging categories, with consideration given to individual customer account activity subsequent to the current period, including cash receipts, in determining the appropriate allowance for doubtful accounts in the current period. Any increases or decreases to this allowance are charged or credited, respectively, as a bad debt expense to general and administrative expenses. We generally use an internal collection effort, which may include our sales personnel as we deem appropriate. After all internal collection efforts have been exhausted, we generally write off the account receivable.

Any accounts with significant balances are reviewed separately to determine an appropriate allowance based on the facts and circumstances of the specific account. During the quarter ended September 30, 2016, we wrote off \$815,000 in accounts receivable related to one international customer that was past due on its payment arrangement, as we determined that the benefits of continued collections efforts did not outweigh the costs of legal proceedings. Our allowance for doubtful accounts previously included an allowance for this accounts receivable, and therefore,

this write-off did not have an impact on net loss for the year ended December 31, 2016. During our review for 2016, we determined no additional reserves were necessary for specific accounts. Based on these criteria, management determined that allowances for doubtful accounts receivable of \$226,000 and \$1.14 million at December 31, 2016 and 2015, respectively, were required.

Deferred Tax Assets - As of each reporting date, management considers new evidence, both positive and negative, that could impact its view with regard to future realization of deferred tax assets. Beginning in 2014, management determined that negative evidence outweighed the positive and established a full valuation allowance against our deferred tax assets. We maintained a full valuation allowance as of December 31, 2016 and 2015.

Our deferred tax assets in Hong Kong were fully reserved with a valuation allowance of \$996,000 as of December 31, 2016 and 2015 and had been fully reserved in all prior periods due to the uncertainty of future taxable income in this jurisdiction to utilize the deferred tax assets. Our Hong Kong subsidiary ceased operations during 2008 and became a dormant entity during 2009. If we use any portion of our deferred tax assets in future periods, the valuation allowance would need to be reversed and may impact our future operating results.

Uncertain Tax Positions - Effective January 1, 2007, we adopted U.S. GAAP guidance regarding the de-recognition, classification, accounting in interim periods, and disclosure requirements for uncertain tax positions. Determining which tax positions qualify as uncertain positions and the subsequent accounting for these positions requires significant estimates and assumptions. Our net accrued income tax liability under the provisions of this guidance was \$434,000 and \$421,000 at December 31, 2016 and 2015, respectively. This liability is only resolved when we obtain an official ruling from the tax authority on the positions or when the statute of limitations expires. Our liability increased by \$13,000 for accrued interest on these positions.

Revenue Recognition - Revenue is recognized when title transfers at the time of shipment from our facility or a third-party fulfillment company's facility, excluding consignment shipments as discussed below; evidence of an arrangement exists; pricing is fixed or determinable; and collectability is reasonably assured. Our standard wholesale customer payment terms are generally between 30 and 90 days, though we may offer extended terms with specific customers and on significant orders from time to time. Some wholesale customers and all direct-to-consumer customers are required to prepay prior to shipment. At the time revenue is recognized, an allowance for estimated returns is established. Any change in the allowance for returns is charged against net sales. For our wholesale customers, our return policy allows for the return of loose jewels and finished jewelry for credit generally within 30 days of shipment and must be returned for a valid reason, such as quality problems or an error in shipment. For our direct-to-consumer sales channels, customers can return their purchases for any reason in accordance with our warranty policy as noted on the charlesandcolvard.com website. We have established an allowance for returns based on our historical return rate, which takes into account any contractual return privileges granted to our customers. Periodically, we ship loose jewel and finished jewelry goods to wholesale customers on consignment terms. Under these consignment terms, the customer assumes the risk of loss and has an absolute right of return for a specified period. Also, from time to time, some wholesale customers may have a contractual right to return a certain percentage of goods for any reason for specified periods of time. In these instances, we only recognize revenue when the contractual right of return is exhausted. Periodically, we ship finished goods inventory to wholesale customers on consignment terms. Under these terms, the customer assumes the risk of loss and has an absolute right of return for a specified period that typically ranges from six months to one year. Our wholesale customers are generally required to make payments on consignment shipments within 60 days upon the customer informing us that it will keep the inventory. Accordingly, we do not recognize revenue on these consignment transactions until the earlier of (1) the customer informing us that it will keep the inventory, (2) the expiration of the right of return period, or (3) the customer informing us that the inventory has been sold.

Recent Accounting Pronouncements - See Note 2 to our consolidated financial statements in Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our consolidated financial statements.

2016 Summary

The following is a summary of key financial results and certain non-financial results achieved for the year ended December 31, 2016:

- Our total consolidated net sales increased by \$3.48 million, or 14%, to \$29.17 million in 2016 from \$25.69 million in 2015. The increase in consolidated net sales was due primarily to the increase in our wholesale business in both the domestic and international markets through our distributor channels and the sale of approximately \$6.77 million of legacy inventory to a large domestic customer as a result of our efforts to reduce these legacy inventories. This increase was partially offset by a decrease in sales of our direct-to-consumer e-commerce business, charlesandcolvard.com, which decreased by 15% to \$4.64 million, compared to the prior year.

Operating expenses from continuing operations increased by \$889,000, or 7.5%, to \$12.70 million in 2016 from \$11.81 million in 2015. Of this increase, sales and marketing expenses increased \$1.27 million, or 22%, to \$7.04 million, primarily as a result of costs associated with implementing our new sales and marketing strategies, including the launch of our new website. General and administrative expenses decreased \$487,000, or 8%, to \$5.54 million primarily as a result of decreased personnel expenses and temporary labor expenses partially offset by an increase in certain fees associated with our Credit Facility. Loss on abandonment of assets increased \$118,000, or 100% in 2016, as we abandoned costs of construction in progress related to website branding and design for our direct-to-consumer e-commerce business, charlesandcolvard.com, due to a change in our corporate strategy to consolidate our web properties.

- Net loss from continuing operations decreased \$1.14 million to a loss of \$3.95 million in 2016 from a net loss of \$5.09 million. The reduction in net loss was primarily due to an increased gross profit margin on greater net sales as we implement our new sales and marketing strategies. These improvements were offset in part by the increased operating expenses.
- Net loss decreased by \$5.05 million, to a loss of \$4.53 million in 2016 from a net loss of \$9.57 million in 2015. Net loss per share was \$0.22 in 2016 compared to a net loss per share of \$0.47 in 2015. The reduction in net loss was primarily due to the discontinuance of our direct-to-consumer home party business and an increased gross profit margin on greater net sales as we implement our new sales and marketing strategies. These improvements were offset in part by the increased operating expenses. We recorded a net loss from continuing operations of \$3.95 million for the year ended December 31, 2016, compared to a net loss from continuing operations of \$5.09 million for the year ended December 31, 2015.
- We generated positive cash flows from continuing operations of \$3.33 million in 2016 compared to positive cash flows of \$5.82 million from continuing operations in 2015. The primary drivers of positive cash flow in 2016 were a decrease in inventory of \$4.00 million, a decrease in accounts receivable of \$1.45 million, \$1.44 million of net non-cash charges, and an increase in accounts payable of \$654,000. These factors more than offset a net loss from operations of \$3.95 million and a decrease in accrued expenses of \$420,000. We generated negative cash flows from discontinued operations of \$1.13 million in 2016 versus \$4.25 million in 2015.
- Cash and cash equivalents at December 31, 2016 were \$7.43 million compared to \$5.27 million at December 31, 2015. The primary reason for this increase is the \$2.21 million of cash flow provided by operations.
- Total inventory, including long-term and consignment inventory, was \$28.13 million as of December 31, 2016, down from approximately \$32.33 million at December 31, 2015. This decrease is primarily a result of specific efforts to sell loose jewel legacy inventory of less desirable quality at lower product margins and includes the sale of approximately \$6.77 million of legacy inventory to a large domestic customer.
- We continue to carry no long-term debt and believe we can fund our growth strategies for the foreseeable future from operating cash flows.

Results of Operations

The following table sets forth certain consolidated statements of operations data for the years ended December 31, 2016 and 2015.

	Year Ended December 31,	
	2016	2015
Net sales	\$ 29,168,128	\$ 25,693,292
Costs and expenses:		
Cost of goods sold	20,401,439	18,943,507
Sales and marketing	7,038,277	5,764,389
General and administrative	5,544,452	6,031,829
Research and development	2,848	17,795
Loss on abandonment of property and equipment	117,930	-
Total costs and expenses	<u>33,104,946</u>	<u>30,757,520</u>
Loss from operations	(3,936,818)	(5,064,228)
Other income (expense):		
Interest income	-	11
Interest expense	(1,737)	(10,359)
Gain on sale of long-term assets	-	125
Total other expense, net	<u>(1,737)</u>	<u>(10,223)</u>
Loss before income taxes from continuing operations	(3,938,555)	(5,074,457)
Income tax net expense from continuing operations	(13,480)	(12,821)
Net loss from continuing operations	<u>(3,952,035)</u>	<u>(5,087,272)</u>
Discontinued Operations:		
Loss from discontinued operations	(586,124)	(4,485,787)
Gain on sale of assets from discontinued operations	12,398	-
Net loss from discontinued operations	<u>(573,726)</u>	<u>(4,485,787)</u>
Net loss	<u>\$ (4,525,761)</u>	<u>\$ (9,573,059)</u>

Consolidated Net Sales

Consolidated net sales for the years ended December 31, 2016 and 2015 comprise the following:

	Year Ended December 31,		Change	
	2016	2015	Dollars	Percent
Loose jewels	\$ 21,451,728	\$ 15,113,249	\$ 6,338,479	42%
Finished jewelry	7,716,400	10,580,043	(2,863,643)	(27)%
Total consolidated net sales	<u>\$ 29,168,128</u>	<u>\$ 25,693,292</u>	<u>\$ 3,474,836</u>	14%

Consolidated net sales were \$29.17 million for the year ended December 31, 2016 compared to \$25.69 million for the year ended December 31, 2015, an increase of \$3.47 million, or 14%. The increase in consolidated net sales for the year ended December 31, 2016 was due primarily to the increase in our wholesale business in both the domestic and international markets through our distributor channels and the sale of approximately \$6.77 million of legacy inventory to a large domestic customer as a result of our efforts to reduce inventories. This increase was partially offset by a decrease in sales of our direct-to-consumer e-commerce business, charlesandcolvard.com, which decreased by 15% to \$4.64 million, compared to the year ended December 31, 2015.

Sales of loose jewels represented 74% and 59% of total consolidated net sales for the years ended December 31, 2016 and 2015, respectively. For the year ended December 31, 2016, loose jewel sales were \$21.45 million compared to \$15.11 million for the year ended December 31, 2015, an increase of \$6.34 million, or 42%. This increase was primarily due to the sale of approximately \$6.77 million of legacy inventory during 2016, our *Forever*

*One*TM sales during 2016 increasing approximately 320% as compared to 2015, and the increase in international sales to distributors in the China and Hong Kong markets due to increased demand. Sales in these markets may fluctuate significantly each reporting period.

Sales of finished jewelry represented 26% and 41% of total consolidated net sales for the years ended December 31, 2016 and 2015, respectively. For the year ended December 31, 2016, finished jewelry sales were \$7.72 million compared to \$10.58 million for the year ended December 31, 2015, a decrease of \$2.86 million, or 27%. This decrease was primarily attributable to lower sales through our wholesale distribution segment as we have transitioned a large customer to larger purchases of loose jewels and fewer purchases of finished jewelry. For the year ended December 31, 2016, the decrease was also attributable in part to the decline of our direct-to-consumer e-commerce business, which had a decrease of 16% in finished jewelry sales to \$4.11 million for the year ended December 31, 2016 compared to \$4.90 million for the year ended December 31, 2015. These decreases were due to lower conversion rates, which we believe relate to the shift in our charlesandcolvard.com presence including the discontinuation of clearance inventory on the website. We expect this trend of lower conversion rates may continue into 2017 as we continue promoting our updated brand platform, deliver an up-market jewelry selection, and position charlesandcolvard.com with a new audience.

U.S. net sales accounted for approximately 90% and 86% of total consolidated net sales during the years ended December 31, 2016 and 2015, respectively. U.S. net sales increased 18% to \$26.16 million during 2016 primarily as a result of increased sales of our wholesale business and the sale of \$6.77 million of legacy inventory to a large domestic customer in the first quarter of 2016.

Our largest U.S. customer during the year ended December 31, 2016 accounted for 23% of our total consolidated sales compared to 25% during the year ended December 31, 2015. A second U.S. customer accounted for 17% of our total consolidated sales during the year ended December 31, 2016 compared to 11% of our total consolidated sales during the year ended December 31, 2015. No additional U.S. customers accounted for more than 10% of total consolidated sales in 2016 or 2015. We expect that we will remain dependent on our ability, and that of our largest customers, to maintain and enhance retail programs. A change in or loss of any of these customer or retailer relationships could have a material adverse effect on our results of operations.

International net sales accounted for approximately 10% and 14% of total consolidated net sales during the years ended December 31, 2016 and 2015, respectively. International net sales decreased 13% during 2016 as we serve distributors in the Hong Kong and India markets and demand for loose jewels in these markets was down compared to 2015.

No international customers accounted for more than 10% of total consolidated sales in 2016 or 2015. A portion of our international consolidated sales represents jewels sold internationally that may be re-imported to U.S. retailers. Our top three international distributors by sales volume during the year ended December 31, 2016 were, in order of sales volume, located in Hong Kong, Hong Kong, and India.

Costs and Expenses

Cost of Goods Sold

Cost of goods sold for the years ended December 31, 2016 and 2015 are as follows:

	Year Ended December 31,		Change	
	2016	2015	Dollars	Percent
Product line cost of goods sold				
Loose jewels	\$ 13,916,749	\$ 9,459,159	\$ 4,457,590	47%
Finished jewelry	4,148,788	6,296,764	(2,147,976)	-34%
Total product line cost of	18,065,537	15,755,923	2,309,614	15%
Non-product line cost of goods sold	2,335,902	3,187,584	(851,682)	-27%
Total cost of goods sold	\$ 20,401,439	\$ 18,943,507	\$ 1,457,932	8%

Total cost of goods sold was \$20.40 million for the year ended December 31, 2016 compared to \$18.94 million for the year ended December 31, 2015, an increase of \$1.46 million, or 8%. Product line cost of goods sold is defined as product cost of goods sold in each of our wholesale distribution and direct-to-consumer e-commerce distribution

operating segments excluding non-capitalized expenses from our manufacturing and production control departments, comprising personnel costs, depreciation, rent, utilities, and corporate overhead allocations; freight out; inventory valuation allowance adjustments; and other inventory adjustments, comprising costs of quality issues, damaged goods, and inventory write-offs.

The increase in cost of goods sold for 2016 as compared to the prior year was primarily due to a \$6.77 million sale of legacy loose gemstone inventory at low margins in 2016. This increase was partially offset by a \$2.15 million decrease in finished jewelry product line cost of goods sold as a result of lower finished jewelry sales for the year ended December 31, 2016 compared to the year ended December 31, 2015 and a decrease in non-product line cost of goods sold of \$852,000, or 27%. The net decrease in non-product line cost of goods sold comprises a \$236,000 decrease in the change in inventory valuation allowances, including inventory shrinkage, recuts, repairs, and scrap reserves, a \$431,000 decrease in other inventory adjustments and a \$224,000 decrease in freight out due to decreased sales volume. These decreases were offset in part by a \$39,000 increase in non-capitalized manufacturing and production control expenses primarily due to timing of receiving work in process into inventory and allocating overhead.

Sales and Marketing

Sales and marketing expenses for the years ended December 31, 2016 and 2015 are as follows:

	<u>Year Ended December 31,</u>		<u>Change</u>	
	<u>2016</u>	<u>2015</u>	<u>Dollars</u>	<u>Percent</u>
Sales and marketing	\$ 7,038,277	\$ 5,764,389	\$ 1,273,888	22%

Sales and marketing expenses were \$7.04 million for the year ended December 31, 2016 compared to \$5.76 million for the year ended December 31, 2015, an increase of \$1.27 million, or 22%.

The increase in sales and marketing expenses for the year ended December 31, 2016 compared to the same period in 2015 was primarily due to a \$959,000 increase in advertising; a \$147,000 increase in professional services primarily related to customer service and public relations; a \$35,000 increase in market research; a \$31,000 increase in recruiting fees; and an \$18,000 increase in office-related and other expenses. These increases were partially offset by a \$95,000 decrease in travel expense due to fewer international trips, a \$92,000 decrease in compensation expense, and a \$45,000 decrease in depreciation expense related to the charlesandcolvard.com e-commerce sales platform.

The increase in advertising expenses for the year ended December 31, 2016 compared to the year ended December 31, 2015 comprises a \$648,000 increase in outside agency fees primarily related to the outside agencies hired to build a brand strategy and architecture and develop a brand design and messaging; a \$225,000 increase in social media advertising and marketing through an outside agency; a \$129,000 increase in cooperative advertising; a \$99,000 increase in internet marketing; and a \$19,000 increase in trade show related expenses. These increases were partially offset by a \$98,000 decrease in product samples; a \$27,000 decrease in print media expenses; and a \$36,000 decrease in promotions.

Compensation costs for the year ended December 31, 2016 compared to the year ended December 31, 2015 decreased primarily as a result of a \$241,000 decrease in severance expense, primarily related to the personnel changes within the wholesale sales organization in the year ended December 31, 2015, and a decrease in commissions of \$220,000, primarily related to sales to specific wholesale customers under which commission plans of sales representatives are based. These increases were partially offset by a \$275,000 increase in salaries and related employee benefits primarily due to adding the new position of Chief Revenue Officer who was formerly the Chief Operating Officer; a \$51,000 increase in bonus expense; a \$28,000 increase in stock-based compensation expense; and a \$16,000 increase in relocation expense.

Sales and marketing expenses are allocated across our distribution channels, which in 2015 included allocations to Charles & Colvard Direct, LLC, a segment we are reporting as discontinued operations. See Note 12, "Discontinued Operations", in the Notes to the Consolidated Financial Statements for further discussion of discontinued operations. Approximately \$237,000 of sales and marketing expenses for the year ended December 31, 2016 is attributable to sales and marketing expenses that are now being allocated to our remaining two continuing operations distribution channels that were previously allocated to Charles & Colvard Direct, LLC.

We expect our total sales and marketing expenses may increase as sales increase; however, this will be dependent on which overall companywide strategies and in which sales channels we may choose to make further investments to increase overall consumer awareness of moissanite and our brands and overall sales growth. Regardless of which future overall strategy is followed, we believe the overall rate of growth should slow and become a lower percentage of sales as expenses more variable in nature, such as advertising and commissions, may increase as part of our strategy to build sales; but fixed expenses remain relatively constant. While employee compensation costs may fluctuate from period to period as we continue to build a more efficient and productive sales organization, we expect that these costs will become more fixed in nature over time.

General and Administrative

General and administrative expenses for the years ended December 31, 2016 and 2015 are as follows:

	<u>Year Ended December 31,</u>		<u>Change</u>	
	<u>2016</u>	<u>2015</u>	<u>Dollars</u>	<u>Percent</u>
General and administrative	\$ 5,544,452	\$ 6,031,829	\$ (487,377)	-8%

General and administrative expenses were \$5.54 million for the year ended December 31, 2016 compared to \$6.03 million for the year ended December 31, 2015, a decrease of \$487,000, or 8%.

The decrease in general and administrative expenses for the year ended December 31, 2016 compared to the year ended December 31, 2015 was primarily due to a \$1.26 million decrease in compensation expenses; \$199,000 decrease in professional services; a \$150,000 decrease in bad debt expense associated with our allowance for doubtful accounts reserve policy; a \$134,000 decrease in depreciation and amortization expense; a \$66,000 decrease in travel expense; a \$49,000 decrease in office-related and other expenses; and a \$29,000 decrease in board retainer fees. These decreases were partially offset by a \$180,000 increase in bank fees primarily attributable to our Credit Facility and a \$40,000 increase in business and franchise taxes.

Compensation expenses decreased for the year ended December 31, 2016 compared to the year ended December 31, 2015 primarily as a result of a decrease in stock-based compensation expense of \$597,000, a majority of which was related to the transition of our President and Chief Executive Officer in 2015; a decrease in severance expense of \$432,000 associated with the departure of a former President and Chief Executive Officer in 2015; a decrease of \$195,000 in salaries and related employee benefits primarily due to transferring the former Chief Operating Officer to the new position of Chief Revenue Officer; and a decrease in bonus expense of \$33,000.

Professional services decreased for the year ended December 31, 2016 compared to the year ended December 31, 2015 primarily due to a decrease in legal fees of \$311,000, of which approximately \$85,000 was related to the transition of our President and Chief Executive Officer in 2015, and a decrease of \$78,000 in public relations expenses that are now included as part of the marketing function. These decreases were partially offset by an increase of \$107,000 in audit and tax services and an increase of \$83,000 in consulting and other professional services primarily related to human resources and sales and use tax projects.

General and administrative expenses are allocated across our distribution channels, which in 2015 included allocations to Charles & Colvard Direct, LLC, a segment we are reporting as discontinued operations. See Note 12, "Discontinued Operations", in the Notes to the Consolidated Financial Statements for further discussion of discontinued operations. Approximately \$1.18 million of general and administrative expenses for the year ended December 31, 2016 is attributable to general and administrative expenses that are now being allocated to our remaining two continuing operations distribution channels that were previously allocated to Charles & Colvard Direct, LLC.

Loss on Abandonment of Assets

Loss on abandonment of assets for the years ended December 31, 2016 and 2015 is as follows:

	<u>Year Ended December 31,</u>		<u>Change</u>	
	<u>2016</u>	<u>2015</u>	<u>Dollars</u>	<u>Percent</u>
Loss on abandonment of assets	\$ 117,930	\$ -	\$ 117,930	100%

Loss on abandonment of assets was \$118,000 for the year ended December 31, 2016 compared to \$0 for the year ended December 31, 2015, an increase of \$118,000. In the year ended December, 31, 2016, we abandoned costs of construction in progress related to website branding and design for our direct-to-consumer e-commerce business, charlesandcolvard.com, due to a change in our corporate strategy to consolidate our web properties.

Provision for Income Taxes

We recognized an income tax net expense of \$13,000 for each of the years ended December 31, 2016 and 2015.

As of each reporting date, management considers new evidence, both positive and negative, that could impact its view with regard to future realization of deferred tax assets. Beginning in 2014, management determined that negative evidence outweighed the positive and established a full valuation allowance against our deferred tax assets. We maintained a full valuation allowance as of December 31, 2016 and 2015.

During the year ended December 31, 2016, we recorded approximately \$13,000 of income tax expense for estimated tax, penalties, and interest for other uncertain tax positions.

Our statutory tax rate is 35% and consists of the federal income tax rate of 34% and a blended state income tax rate of 1%, net of the federal benefit.

Liquidity and Capital Resources

We require cash to fund our operating expenses and working capital requirements, including outlays for capital expenditures. As of December 31, 2016, our principal sources of liquidity were cash and cash equivalents totaling \$7.43 million, trade accounts receivable of \$2.80 million, and current inventory of \$9.77 million, as compared to cash and cash equivalents totaling \$5.27 million, trade accounts receivable of \$3.85 million, and current inventory of \$10.74 million as of December 31, 2015. As described more fully below, we also have access to the \$10 million Credit Facility.

During the year ended December 31, 2016, our working capital increased by approximately \$36,000 to \$16.07 million from \$16.03 million at December 31, 2015. As described more fully below, the increase in working capital at December 31, 2016 is primarily attributable to an increase in our cash and cash equivalents due to our increased cash from operations and a decrease in accrued expenses and other liabilities, a decrease in accrued cooperative advertising, and a decrease in liabilities related to discontinued operations, partially offset by an increase in accounts payable, a decrease in trade accounts receivable, and a decreased allocation of inventory to short-term from long-term.

During the year ended December 31, 2016, \$3.33 million of cash was provided by continuing operations and \$1.13 million of cash was used in discontinued operations. The primary drivers of positive cash flow were a decrease in inventory of \$4.00 million, a decrease in trade accounts receivable of \$1.45 million, an increase in trade accounts payable of \$654,000, and a decrease of \$162,000 in prepaid expenses and other current assets. These factors were partially offset by our loss of \$3.95 million that included \$1.44 million of non-cash expenses, and a decrease in accrued liabilities of \$420,000. Accounts receivable decreased primarily as a result of collection efforts during 2016 on sales made in 2016. We did not offer any extended wholesale customer payment terms during the year ended December 31, 2016; however, we may offer these terms from time to time, which may not immediately increase liquidity as a result of current-period sales. We believe our competitors and other vendors in the wholesale jewelry industry have expanded their use of extended payment terms and, in aggregate, we believe that through our use of extended payment terms, we have provided a competitive response in our market and that our net sales have been favorably impacted. We are unable to estimate the impact of this program on our net sales, but if we ceased providing extended payment terms in select instances, we believe we would not be competitive for some wholesale customers in the marketplace and that our net sales and profits would likely decrease. During the year ended December 31, 2016, we wrote off \$815,000 in accounts receivable related to one international customer that was past due on its payment arrangement as we determined that the benefits of continued collections efforts did not outweigh the cost of legal proceedings. We do not believe our commercial terms were a factor with this customer's non-payment. Our allowance for doubtful accounts previously included an allowance for this accounts receivable, and therefore, this write-off during the year did not have an impact on net loss for the year ended December 31, 2016. We have not experienced any other significant accounts receivable write-offs related to revenue arrangements with extended payment terms. Inventories decreased primarily as a result of sales, including a \$6.77 million sale of legacy jewels to a large customer, offset in part by the purchase of new raw material SiC crystals during the year ended December 31, 2016 pursuant to the Supply Agreement; purchases of jewelry castings, findings, and other jewelry components; and production of moissanite jewels. Prepaid expenses and other assets decreased primarily as a result of the timing of insurance premium payments and other payments in advance of goods or services received. Accounts payable increased primarily as a result of the timing of costs incurred but not yet paid as of December 31, 2016 associated with inventory-related purchases and professional services incurred but not yet due under our vendors' payment terms.

We manufactured approximately \$10.78 million in loose jewels and \$6.09 million in finished jewelry, which includes the cost of the loose jewels and the purchase of precious metals and labor in connection with jewelry production, during the year ended December 31, 2016. We expect our purchases of precious metals and labor to increase as we increase our finished jewelry business. In addition, from the beginning of 2006 through the year ended December 31, 2016, the price of gold has increased significantly (approximately 117%), resulting in higher retail price points for gold jewelry. Because the market price of gold and other precious metals is beyond our control, the upward price trends could continue and have a negative impact on our operating cash flow as we manufacture finished jewelry.

Historically, our raw material inventories of SiC crystals had been purchased under exclusive supply agreements with a limited number of suppliers. Because the supply agreements restricted the sale of these crystals exclusively to us, the suppliers negotiated minimum purchase commitments with us that, when combined with our reduced sales

during the periods when the purchase commitments were in effect, have resulted in levels of inventories that are higher than we might otherwise maintain. As of December 31, 2016, \$18.36 million of our inventories were classified as long-term assets. Loose jewel sales and finished jewelry that we manufacture will utilize both the finished goods loose jewels currently on-hand and, as we deplete certain shapes and sizes, our on-hand raw material SiC crystals of \$2.59 million and new raw material that we are purchasing pursuant to the Supply Agreement.

On December 12, 2014, we entered into the Supply Agreement with Cree, our raw material SiC crystal supplier. Under the Supply Agreement, subject to certain terms and conditions, we agreed to exclusively purchase from Cree, and Cree agreed to exclusively supply, 100% of our required SiC materials in quarterly installments that must equal or exceed a set minimum order quantity. The initial term of the Supply Agreement will expire on June 24, 2018, unless extended by the parties. We also have one option to unilaterally extend the term of the agreement for an additional two-year period, subject to certain conditions. Our total purchase commitment under the Supply Agreement until June 2018 is dependent upon the size of the SiC material and ranges between approximately \$29.60 million and approximately \$31.50 million. As of December 31, 2016, our remaining purchase commitment through June 2018 under the Supply Agreement ranges from approximately \$14.54 million to approximately \$16.44 million.

During the year ended December 31, 2016, we purchased approximately \$8.20 million of SiC crystals from Cree. We expect to use existing cash and cash equivalents and other working capital, together with future cash expected to be provided by operating activities and, if necessary, our Credit Facility, to finance our purchase commitment under the Supply Agreement.

On July 14, 2016, Cree announced that it had entered into an asset purchase agreement with Infineon, pursuant to which Infineon would purchase certain portions of Cree's SiC materials and gemstones business. The transaction, which Cree initially indicated was expected to close by the end of calendar year 2016, contemplated that the Supply Agreement, including all rights and obligations under the Supply Agreement, would be assigned by Cree to Infineon. On February 16, 2017, Cree announced that it was terminating the asset purchase agreement because Cree and Infineon were unable to identify alternatives that would address the national security concerns raised by the Committee on Foreign Investment in the United States. Accordingly, we expect that the terminated transaction will not have any material effect on our supply of SiC materials.

We made no income tax payments during the year ended December 31, 2016. As of December 31, 2016, we had approximately \$882,000 of remaining federal income tax credits, \$533,000 of which expire between 2018 and 2021 and the balance without an expiration, which can be carried forward to offset future income taxes. As of December 31, 2016, we also had federal tax net operating loss carryforwards of approximately \$25.03 million, expiring between 2020 and 2036, which can be used to offset against future federal taxable income; North Carolina tax net operating loss carryforwards across all of the entities of approximately \$20.26 million expiring between 2023 and 2031; and various other state tax net operating loss carryforwards expiring between 2021 and 2036, which can be used to offset against future state taxable income.

On June 25, 2014, we and our wholly owned subsidiaries, Charles & Colvard Direct, LLC and Moissanite.com, LLC (now charlesandcolvard.com, LLC), collectively referred to as the Borrowers, obtained the Credit Facility from Wells Fargo. The Credit Facility may be used for general corporate and working capital purposes, including transaction fees and expenses incurred in connection therewith and the issuance of letters of credit up to a \$1,000,000 sublimit. The Credit Facility will mature on June 25, 2017.

The Credit Facility includes a \$5,000,000 sublimit for advances that are supported by a 90% guaranty provided by the U.S. Export-Import Bank. Advances under the Credit Facility are limited to a borrowing base, which is computed by applying specified advance rates to the value of the Borrowers' eligible accounts and inventory, less reserves. Advances against inventory are further subject to an initial \$3,000,000 maximum. We must maintain a minimum of \$1,000,000 in excess availability at all times. There are no other financial covenants.

Each advance accrues interest at a rate equal to Wells Fargo's 3-month LIBOR rate plus 2.50%, calculated on an actual/360 basis and payable monthly in arrears. Principal outstanding during an event of default accrues interest at a rate of 3% in excess of the above rate. Any advance may be prepaid in whole or in part at any time. In addition, the maximum line amount may be reduced by us in whole or part at any time, subject to a fee equal to 2% of any reduction in the first year after closing, 1% of any reduction in the second year after closing, and 0% thereafter. There are no mandatory prepayments or line reductions.

The Credit Facility is secured by a lien on substantially all assets of the Borrowers, each of which is jointly and severally liable for all obligations thereunder. Wells Fargo's security interest in certain SiC materials is subordinate to Cree's security interest in such materials pursuant to the Supply Agreement and an Intercreditor Agreement with Wells Fargo.

The Credit Facility is evidenced by a credit and security agreement dated as of June 25, 2014, as amended, or the Credit Agreement, and customary ancillary documents. The Credit Agreement contains customary covenants, representations and cash dominion provisions, including a financial reporting covenant and limitations on dividends, distributions, debt, contingent obligations, liens, loans, investments, mergers, acquisitions, divestitures, subsidiaries, affiliate transactions, and changes in control.

Events of default under the Credit Facility include, without limitation, (1) any impairment of the Export-Import Bank guaranty, unless the guaranteed advances are repaid within two business days, (2) an event of default under any other indebtedness of the Borrowers in excess of \$200,000, and (3) a material adverse change in the ability of the Borrowers to perform their obligations under the Credit Agreement or in the Borrowers' assets, liabilities, businesses or prospects, or other circumstances that Wells Fargo believes may impair the prospect of repayment. If an event of default occurs, Wells Fargo is entitled to take enforcement action, including acceleration of amounts due under the Credit Agreement and foreclosure upon collateral.

The Credit Agreement contains other customary terms, including indemnity, expense reimbursement, yield protection, and confidentiality provisions. Wells Fargo is permitted to assign the Credit Facility.

As of December 31, 2016, we had not borrowed against the Credit Facility.

We believe that our existing cash and cash equivalents and other working capital, together with future cash expected to be provided by operating activities, will be sufficient to meet our working capital and capital expenditure needs over the next 12 months. Our future capital requirements and the adequacy of available funds will depend on many factors, including our rate of sales growth; the expansion of our sales and marketing activities; the timing and extent of raw materials and labor purchases in connection with loose jewel production to support our moissanite jewels business and precious metals and labor purchases in connection with jewelry production to support our finished jewelry business; the timing of capital expenditures; and risk factors described in more detail in "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K. We obtained the Credit Facility to mitigate these risks to our cash and liquidity position. Also, we may make investments in, or acquisitions of, complementary businesses, which could also require us to seek additional equity or debt financing.

Off-Balance Sheet Arrangements

We do not use off-balance sheet arrangements with unconsolidated entities or related parties, nor do we use other forms of off-balance sheet arrangements. Accordingly, our liquidity and capital resources are not subject to off-balance sheet risks from unconsolidated entities. As of December 31, 2016, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K.

We have entered into an operating lease for approximately 36,350 square feet of mixed-use space, which we currently occupy, from an unaffiliated third-party for our offices and manufacturing facility in the normal course of business. This type of arrangement is often referred to as a form of off-balance sheet financing.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
Charles & Colvard, Ltd.
Morrisville, North Carolina

We have audited the accompanying consolidated balance sheets of Charles & Colvard, Ltd. as of December 31, 2016 and 2015 and the related consolidated statements of operations, shareholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Charles & Colvard, Ltd. at December 31, 2016 and 2015, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP
Raleigh, North Carolina

March 9, 2017

CHARLES & COLVARD, LTD.
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2016	2015
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 7,427,273	\$ 5,274,305
Accounts receivable, net	2,794,626	3,852,651
Inventory, net	9,770,206	10,739,798
Prepaid expenses and other assets	682,083	701,105
Assets related to discontinued operations	-	83,000
Total current assets	20,674,188	20,650,859
Long-term assets:		
Inventory, net	18,360,211	21,588,622
Property and equipment, net	1,391,116	1,615,683
Intangible assets, net	8,808	71,086
Other assets	71,453	214,588
Total long-term assets	19,831,588	23,489,979
TOTAL ASSETS	\$ 40,505,776	\$ 44,140,838
 LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 3,977,149	\$ 3,323,148
Accrued cooperative advertising	50,000	58,000
Accrued expenses and other liabilities	581,107	891,187
Liabilities related to discontinued operations	-	349,000
Total current liabilities	4,608,256	4,621,335
Long-term liabilities:		
Accrued expenses and other liabilities	594,916	710,223
Accrued income taxes	433,983	420,503
Total long-term liabilities	1,028,899	1,130,726
Total liabilities	5,637,155	5,752,061
Commitments and contingencies (Note 8)		
Shareholders' equity:		
Common stock, no par value; 50,000,000 shares authorized; 21,369,885 and 21,111,585 shares issued and outstanding at December 31, 2016 and 2015, respectively	54,243,816	54,240,247
Additional paid-in capital	14,282,956	13,280,920
Accumulated deficit	(33,658,151)	(29,132,390)
Total shareholders' equity	34,868,621	38,388,777
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 40,505,776	\$ 44,140,838

See Notes to Consolidated Financial Statements.

CHARLES & COLVARD, LTD.
CONSOLIDATED STATEMENTS OF OPERATIONS

	<u>Year Ended December 31,</u>	
	<u>2016</u>	<u>2015</u>
Net sales	\$ 29,168,128	\$ 25,693,292
Costs and expenses:		
Cost of goods sold	20,401,439	18,943,507
Sales and marketing	7,038,277	5,764,389
General and administrative	5,544,452	6,031,829
Research and development	2,848	17,795
Loss on abandonment of property and equipment	117,930	-
Total costs and expenses	<u>33,104,946</u>	<u>30,757,520</u>
Loss from operations	(3,936,818)	(5,064,228)
Other income (expense):		
Interest income	-	11
Interest expense	(1,737)	(10,359)
Gain on sale of long-term assets	-	125
Total other expense, net	<u>(1,737)</u>	<u>(10,223)</u>
Loss before income taxes from continuing operations	(3,938,555)	(5,074,451)
Income tax net expense from continuing operations	(13,480)	(12,821)
Net loss from continuing operations	<u>(3,952,035)</u>	<u>(5,087,272)</u>
Discontinued Operations:		
Loss from discontinued operations	(586,124)	(4,485,787)
Gain on sale of assets from discontinued operations	<u>12,398</u>	<u>-</u>
Net loss from discontinued operations	<u>(573,726)</u>	<u>(4,485,787)</u>
Net loss	<u>\$ (4,525,761)</u>	<u>\$ (9,573,059)</u>
Net loss per common share:		
Basic - continuing operations	\$ (0.19)	\$ (0.25)
Basic - discontinued operations	<u>(0.03)</u>	<u>(0.22)</u>
Basic - total	\$ (0.22)	\$ (0.47)
Diluted - continuing operations	\$ (0.19)	\$ (0.25)
Diluted - discontinued operations	<u>(0.03)</u>	<u>(0.22)</u>
Diluted - total	\$ (0.22)	\$ (0.47)
Weighted average number of shares used in computing net loss per common share:		
Basic	20,926,120	20,407,764
Diluted	20,926,120	20,407,764

See Notes to Consolidated Financial Statements.

CHARLES & COLVARD, LTD.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	<u>Common Stock</u>		Additional Paid-in Capital	Accumulated Deficit	Total Shareholders' Equity
	Number of Shares	Amount			
Balance at December 31, 2014	20,382,333	\$ 53,949,001	\$ 11,628,503	\$ (19,559,331)	\$ 46,018,173
Stock-based compensation	-	-	1,770,897	-	1,770,897
Issuance of restricted stock	487,500	-	-	-	-
Stock option exercises	241,752	291,246	(118,480)	-	172,766
Net loss	-	-	-	(9,573,059)	(9,573,059)
Balance at December 31, 2015	<u>21,111,585</u>	<u>\$ 54,240,247</u>	<u>\$ 13,280,920</u>	<u>\$ (29,132,390)</u>	<u>\$ 38,388,777</u>
Stock-based compensation	-	-	1,003,305	-	1,003,305
Issuance of restricted stock	255,800	-	-	-	-
Stock option exercises	2,500	3,569	(1,269)	-	2,300
Net loss	-	-	-	(4,525,761)	(4,525,761)
Balance at December 31, 2016	<u>21,369,885</u>	<u>\$ 54,243,816</u>	<u>\$ 14,282,956</u>	<u>\$ (33,658,151)</u>	<u>\$ 34,868,621</u>

See Notes to Consolidated Financial Statements.

CHARLES & COLVARD, LTD.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,	
	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (4,525,761)	\$ (9,573,059)
Net loss from discontinued operations	(573,726)	(4,485,787)
Net loss from continuing operations	(3,952,035)	(5,087,272)
Adjustments to reconcile net loss to net cash provided by operating activities of continuing operations:		
Depreciation and amortization	557,393	758,787
Stock-based compensation	959,134	1,545,144
Provision for uncollectible accounts	(73,300)	89,462
Provision for sales returns	(316,000)	(179,000)
Provision for inventory reserves	200,000	436,000
Loss on abandonment of property and equipment	117,930	-
Gain on sale of long-term assets	-	(125)
Changes in operating assets and liabilities:		
Accounts receivable	1,447,325	1,747,140
Inventory	3,998,003	6,174,209
Prepaid expenses and other assets, net	162,157	(103,012)
Accounts payable	654,001	251,517
Accrued cooperative advertising	(8,000)	(162,000)
Accrued income taxes	13,480	12,821
Accrued expenses and other liabilities	(425,387)	338,702
Net cash provided by operating activities of continuing operations	3,334,701	5,822,373
Net cash used in operating activities of discontinued operations	(1,125,578)	(4,254,480)
Net cash provided by operating activities	2,209,123	1,567,893
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(421,761)	(407,452)
Patent, license rights, and trademark costs	(5,615)	(45,742)
Proceeds from sale of long-term assets	250	175
Net cash used in investing activities of continuing operations	(427,126)	(453,019)
Net cash provided by (used in) investing activities of discontinued operations	368,671	(20,676)
Net cash used in investing activities	(58,455)	(473,695)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Stock option exercises	2,300	172,766
Net cash provided by financing activities of continuing operations	2,300	172,766
NET INCREASE IN CASH AND CASH EQUIVALENTS	2,152,968	1,266,964
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	5,274,305	4,007,341
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 7,427,273	\$ 5,274,305
Supplemental disclosure of cash flow information:		
Cash paid during the year for interest	\$ 1,737	\$ 10,359

See Notes to the Consolidated Financial Statements.

CHARLES & COLVARD, LTD.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF BUSINESS

Charles & Colvard, Ltd. (the “Company”), a North Carolina corporation founded in 1995, manufactures, markets, and distributes *Charles & Colvard Created Moissanite*[®] (hereinafter referred to as moissanite or moissanite jewels) and finished jewelry featuring moissanite for sale in the worldwide jewelry market. Moissanite, also known by its chemical name silicon carbide (SiC), is a rare mineral first discovered in a meteorite crater. Because naturally occurring SiC crystals are too small for commercial use, larger crystals must be grown in a laboratory. Leveraging its advantage of being the original and leading worldwide source of created moissanite, the Company’s strategy is to establish itself with reputable, high-quality, and sophisticated brands and to position moissanite as an ethically-sourced, affordable, and luxurious alternative to other gemstones such as diamond. The Company believes this is possible due to moissanite’s exceptional brilliance, fire, durability, and rarity like no other jewel available on the market. The Company sells loose moissanite jewels and finished jewelry at wholesale to distributors, manufacturers, retailers, TV shopping networks, and designers and at retail to end consumers through its wholly owned operating subsidiaries, charlesandcolvard.com, LLC (formerly Moissanite.com, LLC) and Charles & Colvard Direct, LLC (until March 2016), and through third-party marketplaces. As of September 30, 2016, the Company changed the name of its wholly owned subsidiary Moissanite.com, LLC to charlesandcolvard.com, LLC.

In February 2016, the Company made the strategic decision to explore a potential divestiture of its direct-to-consumer home party business previously operated through its Charles & Colvard Direct, LLC (dba *Lulu Avenue*[®]) subsidiary. After careful analysis of the Company’s core competencies, go-to-market strategies, and intent to advance toward profitability, the management team and Board of Directors determined a divestiture of this distribution channel to be in the best interest of the Company and its shareholders. On March 4, 2016, the Company and Charles & Colvard Direct, LLC entered into an asset purchase agreement with Yanbal USA, Inc. (“Yanbal”), under which Yanbal purchased certain assets related to the Company’s direct-to-consumer home party business for \$500,000 and assumed certain liabilities related to such assets. A more detailed description of this transaction is included in Note 12, “Discontinued Operations”.

As a result of the divestiture of the Company’s direct-to-consumer home party business operated through its Charles & Colvard Direct, LLC (dba *Lulu Avenue*[®]) subsidiary, during the three months ended March 31, 2016, the Company began managing its business primarily through its two continuing distribution channels. Accordingly, for the years ended December 31, 2016 and 2015, the Company’s reportable segments are its wholesale distribution channel transacted through the parent entity, and the Company’s direct-to-consumer distribution channel transacted through the wholly owned operating subsidiary, charlesandcolvard.com, LLC. The Company is now presenting the operating results of Charles and Colvard Direct, LLC as a discontinued operation.

2. BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Principles of Consolidation - The accompanying consolidated financial statements as of and for the years ended December 31, 2016 and 2015 include the accounts of the Company and its wholly owned subsidiaries charlesandcolvard.com, LLC (formerly Moissanite.com, LLC), formed in 2011; Charles & Colvard Direct, LLC, formed in 2011; and Charles & Colvard (HK) Ltd., the Company’s Hong Kong subsidiary that became a dormant entity in the second quarter of 2009 and the operations of which ceased in 2008. All intercompany accounts have been eliminated.

Discontinued Operations - The results of operations for businesses that have been disposed of or classified as held-for-sale are segregated from the results of the Company’s continuing operations and classified as discontinued operations for each period presented in the Company’s consolidated income statement. Similarly, the assets and liabilities of such businesses are reclassified from continuing operations and presented as discontinued operations for each period presented on the Company’s consolidated balance sheet.

Use of Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. The most

significant estimates impacting the Company’s consolidated financial statements relate to valuation and classification of inventories, accounts receivable reserves, deferred tax assets, uncertain tax positions, cooperative advertising, and revenue recognition. Actual results could differ materially from those estimates.

Reclassifications - Certain amounts in the prior year’s consolidated financial statements have been reclassified to conform to the current year presentation, primarily amounts described in Note 3, “Segment Information and Geographic Data” and Note 12, “Discontinued Operations” related to changes in the Company’s reportable segments.

Cash and Cash Equivalents - All highly liquid investments with an original maturity of three months or less from the date of purchase are considered to be cash equivalents.

Concentration of Credit Risk - Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and trade accounts receivable. At times, cash balances may exceed the Federal Deposit Insurance Corporation (“FDIC”) insurable limits. The Company has never experienced any losses related to these balances. Non-interest-bearing amounts on deposit in excess of FDIC insurable limits at December 31, 2016 approximated \$7.04 million.

Trade receivables potentially subject the Company to credit risk. The Company’s standard wholesale customer payment terms on trade receivables are generally between 30 and 90 days, though it may offer extended terms with specific customers and on significant orders from time to time. The Company believes its competitors and other vendors in the wholesale jewelry industry have also expanded their use of extended payment terms and, in aggregate, the Company believes that through its use of extended payment terms, it has provided a competitive response in its market and that its net sales have been favorably impacted. The Company is unable to estimate the impact of this program on its net sales, but if it ceased providing extended payment terms in select instances, the Company believes it would not be competitive for some wholesale customers in the marketplace and that its net sales and profits would likely decrease. The Company extends credit to its customers based upon a number of factors, including an evaluation of the customer’s financial condition and credit history that is verified through trade association reference services, the customer’s payment history with the Company, the customer’s reputation in the trade, and/or an evaluation of the Company’s opportunity to introduce its moissanite jewels or finished jewelry featuring moissanite to new or expanded markets. Collateral is not generally required from customers. The need for an allowance for doubtful accounts is determined based upon factors surrounding the credit risk of specific customers, historical trends, and other information. During the year ended December 31, 2016, the Company wrote off \$815,000 in accounts receivable related to one international customer that was past due on its payment arrangement as it determined that the benefits of continued collections efforts did not outweigh the cost of legal proceedings. The Company does not believe its commercial terms were a factor with this customer’s non-payment. The Company’s allowance for doubtful accounts previously included an allowance for this accounts receivable, and therefore, this write-off did not have an impact on net loss for the year ended December 31, 2016. The Company has not experienced any other significant accounts receivable write-offs related to revenue arrangements with extended payment terms.

See Note 13, “Major Customers and Concentration of Credit Risk”, for further discussion of credit risk within trade accounts receivable.

Accounts Receivable Reserves - Estimates are used to determine the amount of two reserves against trade accounts receivable. The first reserve is an allowance for sales returns. At the time revenue is recognized, the Company estimates future returns using a historical return rate that is reviewed quarterly with consideration of any contractual return privileges granted to customers, and it reduces sales and trade accounts receivable by this estimated amount. The allowance for sales returns was \$415,000 and \$731,000 at December 31, 2016 and 2015, respectively.

The following is a reconciliation of the allowance for sales returns:

	Year Ended December 31,	
	2016	2015
Balance, beginning of period	\$ 731,000	\$ 910,000
Additions charged to operations	3,574,297	3,651,741
Sales returns	(3,890,297)	(3,830,741)
Balance, end of period	<u>\$ 415,000</u>	<u>\$ 731,000</u>

The second reserve is an allowance for doubtful accounts for estimated losses resulting from the failure of the Company's customers to make required payments. This allowance reduces trade accounts receivable to an amount expected to be collected. Based on historical percentages of uncollectible accounts by aging category, changes in payment history, and facts and circumstances regarding specific accounts that become known to management when evaluating the adequacy of the allowance for doubtful accounts, the Company determines a percentage based on the age of the receivable that it deems uncollectible. The allowance is then calculated by applying the appropriate percentage to each of the Company's accounts receivable aging categories, with consideration given to individual customer account activity subsequent to the current period, including cash receipts, in determining the appropriate allowance for doubtful accounts in the current period. Any increases or decreases to this allowance are charged or credited, respectively, as a bad debt expense to general and administrative expenses. The Company generally uses an internal collection effort, which may include its sales personnel as it deems appropriate. After all internal collection efforts have been exhausted, the Company generally writes off the account receivable.

Any accounts with significant balances are reviewed separately to determine an appropriate allowance based on the facts and circumstances of the specific account. During the quarter ended September 30, 2016, the Company wrote off \$815,000 in accounts receivable related to one international customer that was past due on its payment arrangement, as the Company determined that the benefits of continued collections efforts did not outweigh the costs of legal proceedings. The Company's allowance for doubtful accounts previously included an allowance for this accounts receivable, and therefore, this write-off did not have an impact on net loss for the year ended December 31, 2016. During its review for 2016, the Company determined no additional reserves were necessary for specific accounts. Based on these criteria, management determined that allowances for doubtful accounts receivable of \$226,000 and \$1.14 million at December 31, 2016 and 2015, respectively, were required.

The following is a reconciliation of the allowance for doubtful accounts:

	Year Ended December 31,	
	2016	2015
Balance, beginning of period	\$ 1,137,000	\$ 1,074,000
(Reductions) additions charged to operations	(73,300)	89,462
Write-offs, net of recoveries	(837,700)	(26,462)
Balance, end of period	<u>\$ 226,000</u>	<u>\$ 1,137,000</u>

Although the Company believes that its reserves are adequate, if the financial condition of its customers deteriorates, resulting in an impairment of their ability to make payments, or if it underestimates the allowances required, additional allowances may be necessary, which would result in increased expense in the period in which such determination is made.

Inventories - Inventories are stated at the lower of cost or market on an average cost basis. Inventory costs include direct material and labor, inbound freight, purchasing and receiving costs, inspection costs, and warehousing costs. Any inventory on hand at the measurement date in excess of the Company's current requirements based on historical and anticipated levels of sales is classified as long-term on the Company's consolidated balance sheets. The Company's classification of its inventory as either short or long-term inventory requires it to estimate the portion of on-hand inventory that can be realized over the next 12 months and does not include precious metal, labor, and other inventory purchases expected to be both purchased and realized in cost of sales over the next 12 months.

Property and Equipment - Property and equipment are stated at cost and are depreciated over their estimated useful lives using the straight-line method as follows:

Machinery and equipment	5 to 12 years
Computer hardware	3 to 5 years
Computer software	3 years
Furniture and fixtures	5 to 10 years
Leasehold improvements	Shorter of the estimated useful life or the lease term

Intangible Assets - The Company capitalizes costs associated with obtaining or defending patents issued or pending for inventions and license rights related to the manufacture of moissanite jewels. Such costs are amortized over the

life of the patent, generally 17 years. The Company also capitalizes licenses it obtains for the use of certain advertising images and external costs incurred for trademarks. Such costs are amortized over the period of the license or estimated useful life of the trademark, respectively.

Impairment of Long-Lived Assets - The Company evaluates the recoverability of its long-lived assets by reviewing them for possible impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets to be held and used is measured by comparing the carrying amount of the asset to future net undiscounted cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment is measured as the amount by which the carrying amount exceeds the fair value and is recognized as an operating expense in the period in which the determination is made. Assets to be disposed are reported at the lower of the carrying amount or fair value less costs to sell. As of December 31, 2016, the Company did not identify any indicators of long-lived asset impairment.

In addition to the recoverability assessment, the Company routinely reviews the remaining estimated useful lives of its long-lived assets. Any reduction in the useful-life assumption will result in increased depreciation and amortization expense in the period when such determination is made, as well as in subsequent periods.

Revenue Recognition - Revenue is recognized when title transfers at the time of shipment from the Company's facility or a third-party fulfillment company's facility, excluding consignment shipments as discussed below; evidence of an arrangement exists; pricing is fixed or determinable; and collectability is reasonably assured. At the time revenue is recognized, an allowance for estimated returns is established. Any change in the allowance for returns is charged against net sales. For the Company's wholesale customers, the return policy allows for the return of jewels and finished jewelry for credit generally within 30 days of shipment and must be returned for a valid reason, such as quality problems or an error in shipment. For the Company's direct-to-consumer sales channels, customers can return their purchases for any reason in accordance with the Company's warranty policy as noted on the charlesandcolvard.com website. The Company has established an allowance for returns based on the Company's historical return rate, which takes into account any contractual return privileges granted to the Company's customers. Periodically, the Company ships loose jewel and finished jewelry goods to wholesale customers on consignment terms. Under these consignment terms, the customer assumes the risk of loss and has an absolute right of return for a specified period. In these instances, the Company only recognizes revenue when the contractual right of return is exhausted. Periodically, the Company ships finished goods inventory to wholesale customers on consignment terms. Under these terms, the customer assumes the risk of loss and has an absolute right of return for a specified period that typically ranges from six months to one year. The Company's wholesale customers are generally required to make payments on consignment shipments within 60 days upon the customer informing the Company that it will keep the inventory. Accordingly, the Company does not recognize revenue on these consignment transactions until the earlier of (1) the customer informing the Company that it will keep the inventory, (2) the expiration of the right of return period, or (3) the customer informing the Company that the inventory has been sold.

Cost of Goods Sold - Cost of goods sold is primarily composed of inventory sold during the period; inventory written off during the period due to ongoing quality reviews or through customer returns; salaries and payroll-related expenses for personnel involved in preparing and shipping product to customers; an allocation of shared expenses such as rent, utilities, communication expenses, and depreciation related to preparing and shipping product to customers; and outbound freight charges.

Advertising Costs - Advertising production costs are expensed as incurred. Media placement costs are expensed the first time the advertising appears.

The Company also offers a cooperative advertising program to certain of its wholesale customers that reimburses, via a credit towards future purchases, a portion of their marketing costs based on the customers' net purchases from the Company and is subject to the customer providing documentation of all advertising performed that includes the Company's products. For the years ended December 31, 2016 and 2015, these approximate amounts were an expense of \$126,000 for 2016 and a credit of (\$4,000) for 2015, and are included as a component of sales and marketing expenses. The credit for the year ended December 31, 2015 is a result of the decision of the Company's domestic distributors to not utilize the advertising credits the Company had accrued during 2014 within the allowable period that were reversed during the three months ended March 31, 2015.

Advertising expenses, inclusive of the cooperative advertising program, for the years ended December 31, 2016 and

2015 were approximately \$2.59 million and \$1.76 million, respectively. Included in total advertising expense are approximately \$56,000 and \$187,000 for the years ended December 31, 2016 and 2015, respectively, related to discontinued operations.

Sales and Marketing - Sales and marketing costs are expensed as incurred. These costs include all expenses of promoting and selling the Company's products and include such items as the salaries, payroll-related expenses, and travel of sales and marketing personnel; advertising; trade shows; market research; sales commissions; and an allocation of overhead expenses attributable to these activities. Except for an allocation to general and administrative expenses, these costs also include the operating expenses of the Company's two wholly owned operating subsidiaries charlesandcolvard.com, LLC and, up to the time of divestiture on March 4, 2016, Charles & Colvard Direct, LLC. See Note 12, "Discontinued Operations".

General and Administrative - General and administrative costs are expensed as incurred. These costs include the salaries and payroll-related expenses of executive, finance, information technology, and administrative personnel; legal, investor relations, and professional fees; general office and administrative expenses; Board of Directors fees; rent; bad debts; and insurance.

Research and Development - Research and development costs are expensed as incurred. These costs primarily comprise salary allocations and consultant fees associated with the study of product enhancement and manufacturing process efficiencies.

Stock-Based Compensation - The Company recognizes compensation expense for stock-based awards based on estimated fair values on the date of grant. The Company uses the Black-Scholes-Merton option pricing model to determine the fair value of stock options. The fair value of other stock-based compensation awards is determined by the market price of the Company's common stock on the date of grant. The expense associated with stock-based compensation is recognized on a straight-line basis over the requisite service period of each award.

Fair value of stock options using the Black-Scholes-Merton option pricing model is estimated on the date of grant utilizing certain assumptions for dividend yield, expected volatility, risk-free interest rate, and expected lives of the awards, as follows:

- *Dividend yield* - Although the Company issued dividends in prior years, a dividend yield of zero is used due to the uncertainty of future dividend payments.
- *Expected volatility* - Volatility is a measure of the amount by which a financial variable such as share price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. The Company estimates expected volatility giving primary consideration to the historical volatility of its common stock.
- *Risk-free interest rate* - The risk-free interest rate is based on the published yield available on U.S. Treasury issues with an equivalent term remaining equal to the expected life of the stock option.
- *Expected lives* - The expected lives of the stock options issued in 2016 and 2015 represent the estimated period of time until exercise or forfeiture and are based on the simplified method of using the mid-point between the vesting term and the original contractual term.

The assumptions used in calculating the fair value of share-based payment awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management's judgment. As a result, if factors change and the Company uses different assumptions, the Company's stock-based compensation expense could be materially different in the future. In addition, the Company is required to estimate the expected forfeiture rates of stock-based awards and only recognize expense for those shares expected to vest. In estimating the Company's forfeiture rates, the Company analyzed its historical forfeiture rates, the remaining lives of unvested stock-based awards, and the amount of vested awards as a percentage of total awards outstanding. If the Company's actual forfeiture rates are materially different from its estimates, or if the Company re-evaluates the forfeiture rates in the future, the stock-based compensation expense could be significantly different from what the Company has recorded in the current period.

Income Taxes - Deferred income taxes are recognized for the income tax consequences of "temporary" differences

by applying enacted statutory income tax rates applicable to future years to differences between the financial statement carrying amounts and the income tax bases of existing assets and liabilities. Valuation allowances are established when necessary to reduce deferred income tax assets to the amount that is more likely than not to be realized.

Net Loss per Common Share - Basic net loss from continuing and discontinued operations per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the periods. Diluted net loss from continuing and discontinued operations per common share is computed using the weighted average number of common and dilutive common equivalent shares outstanding during the periods. Common equivalent shares consist of stock options that are computed using the treasury stock method.

The following table reconciles the differences between the basic and diluted net loss per share presentations:

	Year Ended December 31,	
	2016	2015
Numerator:		
Net loss from continuing operations	\$ (3,952,035)	\$ (5,087,272)
Net loss from discontinued operations	(573,726)	(4,485,787)
Net loss	<u>\$ (4,525,761)</u>	<u>\$ (9,573,059)</u>
Denominator:		
Weighted average common shares outstanding:		
Basic	20,926,120	20,407,764
Stock options	-	-
Diluted	<u>20,926,120</u>	<u>20,407,764</u>
Net loss per common share:		
Basic-continuing operations	\$ (0.19)	\$ (0.25)
Basic-discontinued operations	(0.03)	(0.22)
Basic-total	<u>\$ (0.22)</u>	<u>\$ (0.47)</u>
Diluted-continuing operations	\$ (0.19)	\$ (0.25)
Diluted-discontinued operations	(0.03)	(0.22)
Diluted-total	<u>\$ (0.22)</u>	<u>\$ (0.47)</u>

For the years ended December 31, 2016 and 2015, stock options to purchase approximately 2.13 million and 2.44 million shares, respectively, were excluded from the computation of diluted net loss per common share because the exercise price of the stock options was greater than the average market price of the common shares or the effect of inclusion of such amounts would be anti-dilutive to net loss per common share. For the years ended December 31, 2016 and 2015, 359,000 and 425,000, respectively, of restricted shares that have been issued but not yet vested have been excluded from the computation of diluted net loss per common share.

Recently Adopted/Issued Accounting Pronouncements - In May 2014, the Financial Accounting Standards Board (the "FASB") issued a new accounting standard that supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of the new standard is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. The new standard defines a five step process to achieve this core principle and, in doing so, more judgment and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP. The standard is effective for annual periods beginning after December 15, 2017, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting the standard recognized at the date of adoption (which includes additional footnote disclosures). The Company has begun reviewing its significant contracts and continues to assess the impact of adoption of this accounting standard.

In August 2014, the FASB issued new accounting guidance intended to define management's responsibility to evaluate whether there is substantial doubt about an organization's ability to continue as a going concern and to provide related footnote disclosures. Under U.S. GAAP, financial statements are prepared under the presumption that the reporting organization will continue to operate as a going concern, except in limited circumstances. The going concern basis of accounting is critical to financial reporting because it establishes the fundamental basis for measuring and classifying assets and liabilities. Prior to this accounting guidance, U.S. GAAP lacked guidance about management's responsibility to evaluate whether there is substantial doubt about the organization's ability to continue as a going concern or to provide related footnote disclosures. This new accounting guidance provides guidance to an organization's management, with principles and definitions that are intended to reduce diversity in the timing and content of disclosures that are commonly provided by organizations today in the financial statement footnotes. This new accounting guidance is effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. Early application is permitted for annual or interim reporting periods for which the financial statements have not previously been issued. The Company adopted this accounting guidance in 2016, noting no material impact on its consolidated financial statements.

In July 2015, the FASB issued new accounting guidance that will require an entity to measure inventory valued under the average cost method from the lower of cost or market to the lower of cost or net realizable value, with net realizable value defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. No other changes were made to the current guidance on inventory measurement. This guidance is effective on a prospective basis for public entities for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Early application is permitted as of the beginning of an interim or annual reporting period. On January 1, 2017, the Company began applying the inventory measurement provisions of the new ASU and such provisions are not expected to have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued new guidance that establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either financing or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company currently expects that upon adoption of this new standard, ROU assets and liabilities will be recognized in the balance sheet in amounts that will be material.

In March 2016, the FASB issued updated guidance that 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 the classification of related matters in the statement of cash flows. The update is effective for the Company in the first quarter of 2017. The Company does not expect the adoption of this accounting standard to have a material impact on the Company's financial statements.

3. SEGMENT INFORMATION AND GEOGRAPHIC DATA

The Company reports segment information based on the "management" approach. The management approach designates the internal reporting used by management for making operating decisions and assessing performance as the source of the Company's operating and reportable segments.

As of September 30, 2016, the Company changed the name of its wholly owned subsidiary Moissanite.com, LLC to charlesandcolvard.com, LLC.

In 2015, the Company managed its business primarily through the three distribution channels that it used to sell its product lines, loose jewels and finished jewelry, which included Charles and Colvard Direct, LLC. Accordingly, the Company determined its three operating and reportable segments to be wholesale distribution transacted through the parent entity, and the two direct-to-consumer distribution channels transacted through the Company's wholly owned operating subsidiaries, charlesandcolvard.com, LLC and Charles & Colvard Direct, LLC. On March 4, 2016, the Company divested its direct-to-consumer home party business previously operated through its Charles & Colvard Direct, LLC (dba Lulu Avenue[®]) subsidiary. As a result, during the three months ended March 31, 2016, the Company began managing its business primarily through its two continuing distribution channels. Accordingly, the Company is presenting segment results for the two continuing operating and reportable segments within this

footnote and the segment results for Charles & Colvard Direct, LLC within Note 12, “Discontinued Operations”. The accounting policies of these segments are the same as those described in Note 2, “Basis of Presentation and Significant Accounting Policies”.

The Company evaluates the financial performance of its segments based on net sales; product line gross profit, or the excess of product line sales over product line cost of goods sold; and operating income (loss). Product line cost of goods sold is defined as product cost of goods sold in each of the Company’s wholesale distribution and direct-to-consumer distribution operating segment excluding non-capitalized expenses from the Company’s manufacturing and production control departments, comprising personnel costs, depreciation, rent, utilities, and corporate overhead allocations; freight out; inventory valuation allowance adjustments; and other inventory adjustments, comprising costs of quality issues, damaged goods, and inventory write-offs.

The Company allocates certain general and administrative expenses from its parent entity to its direct-to-consumer distribution segment primarily based on net sales and number of employees to arrive at segment operating loss. Unallocated expenses, which also include interest and taxes, remain in the parent entity’s wholesale distribution segment.

Summary financial information by reportable segment is as follows:

	Year Ended December 31, 2016		
	<u>Wholesale</u>	<u>charlesandcolvard .com</u>	<u>Total</u>
Net sales			
Loose jewels	\$ 20,929,322	\$ 522,406	\$ 21,451,728
Finished jewelry	3,601,768	4,114,632	7,716,400
Total	<u>\$ 24,531,090</u>	<u>\$ 4,637,038</u>	<u>\$ 29,168,128</u>
Product line cost of goods sold			
Loose jewels	\$ 13,851,463	\$ 65,286	\$ 13,916,749
Finished jewelry	2,497,788	1,651,000	4,148,788
Total	<u>\$ 16,349,251</u>	<u>\$ 1,716,286</u>	<u>\$ 18,065,537</u>
Product line gross profit			
Loose jewels	\$ 7,077,859	\$ 457,120	\$ 7,534,979
Finished jewelry	1,103,980	2,463,632	3,567,612
Total	<u>\$ 8,181,839</u>	<u>\$ 2,920,752</u>	<u>\$ 11,102,591</u>
Operating loss	\$ (1,603,947)	\$ (2,332,871)	\$ (3,936,818)
Depreciation and amortization	\$ 479,517	\$ 77,876	\$ 557,393
Total assets	\$ 40,167,149	\$ 338,627	\$ 40,505,776
Capital expenditures	\$ 158,702	\$ 263,059	\$ 421,761

Year Ended December 31, 2015

	charlesandcolvard		Total
	Wholesale	.com	
Net sales			
Loose jewels	\$ 14,581,554	\$ 531,695	\$ 15,113,249
Finished jewelry	5,683,478	4,896,565	10,580,043
Total	<u>\$ 20,265,032</u>	<u>\$ 5,428,260</u>	<u>\$ 25,693,292</u>
Product line cost of goods sold			
Loose jewels	\$ 9,375,195	\$ 83,964	\$ 9,459,159
Finished jewelry	3,867,080	2,429,684	6,296,764
Total	<u>\$ 13,242,275</u>	<u>\$ 2,513,648</u>	<u>\$ 15,755,923</u>
Product line gross profit			
Loose jewels	\$ 5,206,359	\$ 447,731	\$ 5,654,090
Finished jewelry	1,816,398	2,466,881	4,283,279
Total	<u>\$ 7,022,757</u>	<u>\$ 2,914,612</u>	<u>\$ 9,937,369</u>
Operating loss	\$ (3,736,111)	\$ (1,328,117)	\$ (5,064,228)
Depreciation and amortization	\$ 652,326	\$ 106,461	\$ 758,787
Total assets	\$ 43,882,939	\$ 174,899	\$ 44,057,838
Capital expenditures	\$ 291,372	\$ 116,080	\$ 407,452

A reconciliation of the Company's product line cost of goods sold to cost of goods sold as reported in the consolidated financial statements is as follows:

	Year Ended December 31,	
	2016	2015
Product line cost of goods sold	\$ 18,065,537	\$ 15,755,923
Non-capitalized manufacturing and production control expenses	1,427,924	1,388,268
Freight out	376,726	600,751
Inventory valuation allowances	200,000	436,000
Other inventory adjustments	331,252	762,565
Cost of goods sold	<u>\$ 20,401,439</u>	<u>\$ 18,943,507</u>

The Company's net inventories by product line maintained in the parent entity's wholesale distribution segment are as follows:

	December 31,	
	2016	2015
Loose jewels		
Raw materials	\$ 2,586,045	\$ 6,741,712
Work-in-process	10,589,424	5,516,799
Finished goods	9,455,393	15,877,436
Finished goods on consignment	5,473	55,388
Total	<u>\$ 22,636,335</u>	<u>\$ 28,191,335</u>
Finished jewelry		
Raw materials	\$ 520,572	\$ 190,427
Work-in-process	458,702	514,946
Finished goods	4,081,275	3,193,569
Finished goods on consignment	416,305	200,613
Total	<u>\$ 5,476,854</u>	<u>\$ 4,099,555</u>

Supplies inventories of approximately \$17,000 and \$38,000 at December 31, 2016 and 2015, respectively, included in finished goods inventories in the consolidated financial statements are omitted from inventories by product line because they are used in both product lines and are not maintained separately. The Company's continuing operating subsidiary carries no net inventories, and inventory is transferred without intercompany markup from the parent entity's wholesale distribution segment as product line cost of goods sold when sold to the end consumer.

The Company recognizes sales by geographic area based on the country in which the customer is based. A portion of the Company's international wholesale distribution segment sales represents products sold internationally that may be re-imported to U.S. retailers. Sales to international end consumers made by the Company's direct-to-consumer distribution segment, charlesandcolvard.com LLC, are included in U.S. sales because products are shipped and invoiced to a U.S.-based intermediary party that assumes all international shipping and credit risks. The following presents certain data by geographic area:

	Year Ended December 31,	
	2016	2015
Net sales		
United States	\$ 26,164,660	\$ 22,224,076
International	3,003,468	3,469,216
Total	<u>\$ 29,168,128</u>	<u>\$ 25,693,292</u>

	December 31,	
	2016	2015
Property and equipment, net		
United States	\$ 1,391,116	\$ 1,615,683
International	-	-
Total	<u>\$ 1,391,116</u>	<u>\$ 1,615,683</u>

	December 31,	
	2016	2015
Intangible assets, net		
United States	\$ 8,808	\$ 15,362
International	-	55,724
Total	<u>\$ 8,808</u>	<u>\$ 71,086</u>

4. FAIR VALUE MEASUREMENTS

Under U.S. GAAP, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. U.S. GAAP also establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are obtained from independent sources and can be validated by a third party, whereas unobservable inputs reflect assumptions regarding what a third party would use in pricing an asset or liability. The fair value hierarchy consists of three levels based on the reliability of inputs, as follows:

- *Level 1* - quoted prices in active markets for identical assets and liabilities
- *Level 2* - inputs other than Level 1 quoted prices that are directly or indirectly observable
- *Level 3* - unobservable inputs that are not corroborated by market data

The Company evaluates assets and liabilities subject to fair value measurements on a recurring and non-recurring basis to determine the appropriate level to classify them for each reporting period. This determination requires significant judgments to be made by management of the Company. The financial instruments identified as subject to fair value measurements on a recurring basis are cash and cash equivalents, trade accounts receivable, and trade accounts payable. All financial instruments are reflected in the consolidated balance sheets at carrying value, which approximates fair value due to the short-term nature of these financial instruments.

Assets that are measured at fair value on a non-recurring basis include property and equipment, leasehold improvements, and intangible assets, comprising patents, license rights, and trademarks. These items are recognized at fair value when they are considered to be impaired. As of December 31, 2016, no assets were identified for impairment. Level 3 inputs are primarily based on the estimated future cash flows of the asset determined by market inquiries to establish fair market value of used machinery or future revenue expected to be generated with the assistance of patents and trademarks.

5. INVENTORIES

The Company's total inventories, net of reserves, consisted of the following as of December 31, 2016 and 2015:

	December 31,	
	2016	2015
Raw materials	\$ 3,106,617	\$ 6,932,139
Work-in-process	11,048,126	6,031,745
Finished goods	15,074,896	20,441,535
Finished goods on consignment	467,778	293,001
Less inventory reserves	(1,567,000)	(1,370,000)
Total	<u>\$ 28,130,417</u>	<u>\$ 32,328,420</u>
Short-term portion	\$ 9,770,206	\$ 10,739,798
Long-term portion	18,360,211	21,588,622
Total	<u>\$ 28,130,417</u>	<u>\$ 32,328,420</u>

Inventories are stated at the lower of cost or market on an average cost basis. Inventory costs include direct material and labor, inbound freight, purchasing and receiving costs, inspection costs, and warehousing costs. Any inventory on hand at the measurement date in excess of the Company's current requirements based on historical and anticipated levels of sales is classified as long-term on the Company's consolidated balance sheets. The Company's classification of its inventory as either short- or long-term inventory requires it to estimate the portion of on-hand inventory that can be realized over the next 12 months and does not include precious metal, labor, and other inventory purchases expected to be both purchased and realized in cost of goods sold over the next 12 months.

The Company's work-in-process inventories include raw SiC crystals on which processing costs, such as labor and sawing, have been incurred and components, such as metal castings and finished good moissanite jewels, that have

been issued to jobs in the manufacture of finished jewelry. The Company's moissanite jewel manufacturing process involves the production of intermediary shapes, called "preforms," that vary depending upon the size and shape of the finished jewel. To maximize manufacturing efficiencies, preforms may be made in advance of current finished inventory needs but remain in work-in-process inventories. As of December 31, 2016 and December 31, 2015, work-in-process inventories issued to active production jobs approximated \$7.18 million and \$3.02 million, respectively.

The Company's jewels do not degrade in quality over time and inventory generally consists of the shapes and sizes most commonly used in the jewelry industry. In addition, the majority of jewel inventory is not mounted in finished jewelry settings and is therefore not subject to fashion trends nor is obsolescence a significant factor. Presently, the Company has very small market penetration in the worldwide jewelry market, and the Company had the exclusive right in the U.S. through August 2015 and had the exclusive right in many other countries into the third quarter of 2016 to produce and sell created SiC for use in jewelry applications. During the years ended December 31, 2016 and 2015, management identified an opportunity to sell approximately \$6.77 million and \$2.28 million, respectively, of legacy loose jewel inventory of less desirable quality. As a result of these sales and feedback from customers on the value of some of these goods, the Company determined a lower of cost or market reserve of \$517,000 and \$352,000 as of December 31, 2016 and December 31, 2015, respectively, was required on some of the remaining inventory of these lower quality goods.

The Company manufactures finished jewelry featuring moissanite. Relative to loose moissanite jewels, finished jewelry is more fashion oriented and subject to styling trends that could render certain designs obsolete. The majority of the Company's finished jewelry featuring moissanite is held in inventory for resale and consists of such basic designs as stud earrings, solitaire and three-stone rings, pendants, and bracelets that tend not to be subject to significant obsolescence risk due to their classic styling. In addition, the Company manufactures small individual quantities of designer-inspired moissanite fashion jewelry as part of its sample line that are used in the selling process to its wholesale customers.

Prior to March 2016, the Company purchased fashion finished jewelry comprising base metals and non-precious gemstones for sale through *Lulu Avenue*[®], the Company's former direct-to-consumer home party division of the Company's wholly owned operating subsidiary, Charles & Colvard Direct, LLC. This finished jewelry was fashion oriented and subject to styling trends that could change with each catalog season, of which there are generally two each year. Typically, in the jewelry industry, slow-moving or discontinued lines are sold as closeouts or liquidated in alternative sales channels. Management reviews the finished jewelry inventory on an ongoing basis for any lower of cost or market and obsolescence issues. Management identified certain fashion finished jewelry inventory that could not be sold due to damage or branding issues and established an obsolescence reserve of \$169,000 as of December 31, 2016 and \$164,000 as of December 31, 2015, for the carrying costs in excess of any estimated scrap values. As of December 31, 2016 and December 31, 2015, management identified certain finished jewelry featuring moissanite that was obsolete due to damage and other factors that indicate the finished jewelry is unsaleable, and established an obsolescence reserve of \$258,000 and \$225,000, respectively, for the carrying costs in excess of any estimated scrap values.

Periodically, the Company ships finished goods inventory to wholesale customers on consignment terms. Under these terms, the customer assumes the risk of loss and has an absolute right of return for a specified period. Finished goods on consignment at December 31, 2016 and December 31, 2015 are net of shrinkage reserves of \$46,000 and \$36,000, respectively, to allow for certain loose jewels and finished jewelry on consignment with wholesale customers that may not be returned or may be returned in a condition that does not meet the Company's current grading or quality standards.

Total net loose jewel inventories at December 31, 2016 and December 31, 2015, including inventory on consignment net of reserves, were \$22.64 million and \$28.19 million, respectively. The loose jewel inventories at December 31, 2016 and December 31, 2015 include shrinkage reserves of \$67,000 and \$50,000, respectively, which includes \$7,000 and \$10,000 of shrinkage reserves on inventory on consignment at December 31, 2016 and December 31, 2015, respectively. Loose jewel inventories at December 31, 2016 and December 31, 2015 also include recut reserves of \$425,000 and \$449,000, respectively.

Total net jewelry inventories at December 31, 2016 and December 31, 2015, including inventory on consignment net of reserves, finished jewelry featuring moissanite manufactured by the Company, and fashion finished jewelry purchased and owned by the Company which was made for sale through *Lulu Avenue*[®], were \$5.48 million and

\$4.10 million, respectively. The finished jewelry inventories at December 31, 2016 and December 31, 2015 also include shrinkage reserves of \$102,000 and \$95,000, respectively, including shrinkage reserves of \$39,000 and \$27,000 on inventory on consignment, respectively; and a repairs reserve of \$29,000 and \$31,000, respectively.

The need for adjustments to inventory reserves is evaluated on a period-by-period basis.

6. PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

	December 31,	
	2016	2015
Computer software	\$ 1,192,922	\$ 1,771,102
Machinery and equipment	956,050	922,532
Computer hardware	874,347	855,348
Leasehold improvements	1,083,634	1,030,423
Furniture and fixtures	309,046	302,064
Total	<u>4,415,999</u>	<u>4,881,469</u>
Less accumulated depreciation	<u>(3,024,883)</u>	<u>(3,265,786)</u>
Property and equipment, net	<u>\$ 1,391,116</u>	<u>\$ 1,615,683</u>

Depreciation expense for the years ended December 31, 2016 and 2015 was approximately \$528,000 and \$672,000, respectively.

Included in total depreciation expense are approximately \$26,000 and \$98,000 for the years ended December 31, 2016 and 2015, respectively, related to discontinued operations.

7. INTANGIBLE ASSETS

Intangible assets consist of the following:

	December 31,		Weighted Average Amortization Period (in Years)
	2016	2015	
Patents	\$ 958,604	\$ 958,604	0.4
Trademarks	55,824	50,208	1.8
License rights	6,718	6,718	0.0
Total	1,021,146	1,015,530	
Less accumulated amortization	(1,012,338)	(944,444)	
Intangible assets, net	<u>\$ 8,808</u>	<u>\$ 71,086</u>	

Amortization expense for the years ended December 31, 2016 and 2015 was approximately \$68,000 and \$192,000, respectively. Amortization expense on existing intangible assets is estimated to be \$8,000 for 2017, and \$1,000 for 2018.

Included in total amortization expense are approximately \$13,000 and \$6,700 for the years ended December 31, 2016 and 2015, respectively, related to discontinued operations.

8. COMMITMENTS AND CONTINGENCIES

Lease Commitments

On December 9, 2013, the Company entered into a Lease Agreement, as amended on December 23, 2013 and April 15, 2014 (the "Lease Agreement"), for a new corporate headquarters, which occupies approximately 36,350 square feet of office, storage, and light manufacturing space. The Company took possession of the leased property on May 23, 2014 once certain improvements to the leased space were completed, and did not have access to the property before this date. These improvements and other lease signing and moving incentives offered by the landlord totaled approximately \$550,000 and \$73,000, respectively, which will be amortized over the life of the lease until October 31, 2021. Included in the Lease Agreement is a seven-month rent abatement period effective June 2014 through December 2014.

The Company recognizes rent expense on a straight-line basis, giving consideration to the rent holidays and escalations, the lease signing and moving allowance to be paid to the Company, and the rent abatement.

As of December 31, 2016, the Company's future minimum payments under the operating leases were as follows:

2017	\$ 584,789
2018	600,871
2019	617,395
2020	634,373
2021	541,957
Total	<u>\$ 2,979,385</u>

Rent expense for the years ended December 31, 2016 and 2015 was approximately \$539,000 and \$504,000, respectively.

Included in total rent expense are approximately \$40,000 and \$66,000 for the years ended December 31, 2016 and 2015, respectively, related to discontinued operations.

Purchase Commitments

On December 12, 2014, the Company entered into a new exclusive supply agreement (the “Supply Agreement”) with Cree, Inc. (“Cree”), which superseded and replaced the exclusive supply agreement that was set to expire in 2015. Under the Supply Agreement, subject to certain terms and conditions, the Company agreed to exclusively purchase from Cree, and Cree agreed to exclusively supply, 100% of the Company’s required SiC materials in quarterly installments that must equal or exceed a set minimum order quantity. The initial term of the Supply Agreement will expire on June 24, 2018, unless extended by the parties. The Company also has one option to unilaterally extend the term of the agreement for an additional two-year period, subject to certain conditions. The Company’s total purchase commitment under the Supply Agreement until June 2018 is dependent upon the size of the SiC material and ranges between approximately \$29.60 million and approximately \$31.50 million. As of December 31, 2016, the Company’s remaining purchase commitment through June 2018 under the Supply Agreement ranges from approximately \$14.54 million to approximately \$16.44 million.

During the year ended December 31, 2016 and 2015, the Company purchased approximately \$8.20 million and \$6.86 million, respectively, of SiC crystals from Cree.

9. LINE OF CREDIT

On June 25, 2014, the Company and its wholly owned subsidiaries, Charles & Colvard Direct, LLC, and Moissanite.com, LLC (now charlesandcolvard.com, LLC) (collectively, the “Borrowers”), obtained a \$10,000,000 asset-backed revolving credit facility (the “Credit Facility”) from Wells Fargo Bank, National Association (“Wells Fargo”). The Credit Facility will be used for general corporate and working capital purposes, including transaction fees and expenses incurred in connection therewith and the issuance of letters of credit up to a \$1,000,000 sublimit. The Credit Facility will mature on June 25, 2017.

The Credit Facility includes a \$5,000,000 sublimit for advances that are supported by a 90% guaranty provided by the U.S. Export-Import Bank. Advances under the Credit Facility are limited to a borrowing base, which is computed by applying specified advance rates to the value of the Borrowers’ eligible accounts and inventory, less reserves. Advances against inventory are further subject to an initial \$3,000,000 maximum. The Borrowers must maintain a minimum of \$1,000,000 in excess availability at all times. There are no other financial covenants.

Each advance accrues interest at a rate equal to Wells Fargo’s 3-month LIBOR rate plus 2.50%, calculated on an actual/360 basis and payable monthly in arrears. Principal outstanding during an event of default accrues interest at a rate of 3% in excess of the above rate. Any advance may be prepaid in whole or in part at any time. In addition, the maximum line amount may be reduced by the Company in whole or part at any time, subject to a fee equal to 2% of any reduction in the first year after closing, 1% of any reduction in the second year after closing, and 0% thereafter. There are no mandatory prepayments or line reductions.

The Credit Facility is secured by a lien on substantially all assets of the Borrowers, each of which is jointly and severally liable for all obligations thereunder. Wells Fargo’s security interest in certain SiC materials is subordinate to Cree’s security interest in such materials pursuant to the Supply Agreement and an Intercreditor Agreement with Wells Fargo.

The Credit Facility is evidenced by a credit and security agreement, dated as of June 25, 2014, as amended (the “Credit Agreement”), and customary ancillary documents. The Credit Agreement contains customary covenants, representations and cash dominion provisions, including a financial reporting covenant and limitations on dividends, distributions, debt, contingent obligations, liens, loans, investments, mergers, acquisitions, divestitures, subsidiaries, affiliate transactions, and changes in control.

Events of default under the Credit Facility include, without limitation, (1) any impairment of the Export-Import Bank guaranty, unless the guaranteed advances are repaid within two business days, (2) an event of default under any other indebtedness of the Borrowers in excess of \$200,000, and (3) a material adverse change in the ability of the Borrowers to perform their obligations under the Credit Agreement or in the Borrowers’ assets, liabilities, businesses or prospects, or other circumstances that Wells Fargo believes may impair the prospect of repayment. If an event of default occurs, Wells Fargo is entitled to take enforcement action, including acceleration of amounts due under the Credit Agreement and foreclosure upon collateral.

The Credit Agreement contains other customary terms, including indemnity, expense reimbursement, yield protection, and confidentiality provisions. Wells Fargo is permitted to assign the Credit Facility.

As of December 31, 2016, the Company had not borrowed against the Credit Facility.

10. SHAREHOLDERS' EQUITY AND STOCK-BASED COMPENSATION

Common Stock

The Company is authorized to issue 50,000,000 shares of common stock, no par value. As of December 31, 2016 and 2015, it had 21,369,885 and 21,111,585 shares of common stock outstanding, respectively. Holders of common stock are entitled to one vote for each share held.

Preferred Stock

The Board of Directors is authorized, without further shareholder approval, to issue up to 10,000,000 shares of preferred stock, no par value. The preferred stock may be issued from time to time in one or more series. No shares of preferred stock had been issued as of December 31, 2016.

Equity Compensation Plans

1997 Omnibus Stock Plan

In 1997, the Company adopted the 1997 Omnibus Stock Plan of Charles & Colvard, Ltd. (the "1997 Omnibus Plan"). The 1997 Omnibus Plan authorized the Company to grant stock options, stock appreciation rights, and restricted stock awards (collectively, "awards") to selected employees, independent contractors, and directors of the Company and related corporations in order to promote a closer identification of their interests with those of the Company and its shareholders. All stock options granted under the 1997 Omnibus Plan have an exercise price equal to the market price of the Company's common stock on the date the stock option was granted. Stock options granted to employees under the 1997 Omnibus Plan generally vest over three years and have terms of up to 10 years, with the exception of stock options granted in 2005 under the Executive Compensation Plan (which is governed by and subject to the 1997 Omnibus Plan) that vested immediately and stock options granted in 2006 under the Executive Compensation Plan that vested at the end of three years. Stock options granted to the Board of Directors under the 1997 Omnibus Plan generally vested over one year and have terms of up to 10 years. The terms of stock options granted to independent contractors varied depending on the specific grant, but the terms are no longer than 10 years. Restricted stock awards granted to members of the Board of Directors vested at the end of one year. The 1997 Omnibus Plan expired (with respect to future grants) on September 30, 2007. As of December 31, 2016 and 2015, there were 0 and 540 stock options outstanding under the 1997 Omnibus Plan, respectively.

2008 Stock Incentive Plan

In May 2008, the shareholders of the Company approved the adoption of the Charles & Colvard, Ltd. 2008 Stock Incentive Plan, as amended on March 31, 2015 and approved by the shareholders of the Company on May 20, 2015 and further amended on March 15, 2016 and approved by the shareholders of the Company on May 18, 2016 (the "2008 Plan"), which replaced the 1997 Omnibus Plan. The 2008 Plan authorizes the Company to grant stock options, stock appreciation rights, restricted stock, and other equity awards to selected employees, directors, and independent contractors. The aggregate number of shares of the Company's common stock that may be issued pursuant to awards granted under the 2008 Plan shall not exceed the sum of 6,000,000 plus any shares of common stock subject to an award granted under the 1997 Omnibus Plan or any other stock incentive plan maintained by the Company prior to the 2008 Plan (each, a "Prior Plan") that is forfeited, cancelled, terminated, expires, or lapses for any reason without the issuance of shares pursuant to the award, or shares subject to an award granted under a Prior Plan which shares are forfeited to, or repurchased or reacquired by, the Company. Stock options granted to employees under the 2008 Plan generally vest over four years and have terms of up to 10 years. The vesting schedules and terms of stock options granted to independent contractors vary depending on the specific grant, but the terms are no longer than 10 years. Restricted stock awards granted to members of the Board of Directors vest at the end of one year on the date of the Annual Meeting of Shareholders. The vesting schedules of restricted stock awards granted to employees or independent contractors vary depending on the specific grant but are generally four

years or less. Only stock options and restricted stock have been granted under the 2008 Plan. As of December 31, 2016 and 2015, there were 2,134,898 and 2,441,077 stock options outstanding under the 2008 Plan, respectively.

Stock-Based Compensation

The following table summarizes the components of the Company's stock-based compensation included in net loss:

	<u>Year Ended December 31,</u>	
	<u>2016</u>	<u>2015</u>
Employee stock options	\$ 383,778	\$ 697,269
Consultant stock options	170,622	257,342
Restricted stock awards	448,906	816,286
Total	<u>\$ 1,003,306</u>	<u>\$ 1,770,897</u>

Due to the Company's valuation allowance against deferred tax assets as discussed further in Note 11, "Income Taxes", the income tax benefits for 2016 and 2015 were fully reserved.

No stock-based compensation was capitalized as a cost of inventory during the years ended December 31, 2016 and 2015.

Included in total stock-based compensation are approximately \$44,000 and \$226,000 for the years ended December 31, 2016 and 2015, respectively, related to discontinued operations.

Stock Options

The following is a summary of the stock option activity for the years ended December 31, 2016 and 2015:

	<u>Shares</u>	<u>Weighted Average Exercise Price</u>
	Outstanding, December 31, 2014	1,665,571
Granted	1,413,765	\$ 1.28
Exercised	(241,752)	\$ 0.71
Forfeited	(129,434)	\$ 3.08
Expired	(267,073)	\$ 3.17
Outstanding, December 31, 2015	<u>2,441,077</u>	\$ 2.11
Granted	591,005	\$ 1.14
Exercised	(2,500)	\$ 0.92
Forfeited	(449,122)	\$ 1.43
Expired	(445,562)	\$ 2.09
Outstanding, December 31, 2016	<u>2,134,898</u>	\$ 1.99

The weighted average grant date fair value of stock options granted during the years ended December 31, 2016 and 2015 was \$0.63 and \$0.72, respectively. The total fair value of stock options that vested during the years ended December 31, 2016 and 2015 was approximately \$780,000 and \$862,000, respectively. The fair value of each stock option is estimated on the date of grant using the Black-Scholes-Merton option pricing model with the following weighted average assumptions for stock options granted during the years ended December 31, 2016 and 2015:

	<u>Year Ended December 31,</u>	
	<u>2016</u>	<u>2015</u>
Dividend yield	0.0%	0.0%
Expected volatility	62.2%	63.8%
Risk-free interest rate	1.42%	1.64%
Expected lives (years)	5.6	5.7

The following table summarizes information about stock options outstanding at December 31, 2016:

Options Outstanding			Options Exercisable			Options Vested or Expected to Vest		
Balance as of 12/31/2016	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Balance as of 12/31/2016	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Balance as of 12/31/2016	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price
2,134,898	6.71	\$ 1.99	1,477,644	5.65	\$ 2.30	2,041,970	6.60	\$ 2.02

As of December 31, 2016, the unrecognized stock-based compensation expense related to unvested stock options was approximately \$323,000, which is expected to be recognized over a weighted average period of approximately 20 months.

The aggregate intrinsic value of stock options outstanding, exercisable, and vested or expected to vest at December 31, 2016 was approximately \$18,000. This amount is before applicable income taxes and represents the closing market price of the Company's common stock at December 31, 2016 less the grant price, multiplied by the number of stock options that had a grant price that is less than the closing market price. This amount represents the amount that would have been received by the optionees had these stock options been exercised on that date. During the years ended December 31, 2016 and 2015, the aggregate intrinsic value of stock options exercised was approximately \$0 and \$167,000, respectively.

Restricted Stock

The following is a summary of the restricted stock activity for the years ended December 31, 2016 and 2015:

	Shares	Weighted Average Grant Date Fair Value
Unvested, December 31, 2014	287,006	\$ 3.29
Granted	487,500	\$ 1.38
Vested	(349,506)	\$ 2.36
Canceled	-	\$ -
Unvested, December 31, 2015	425,000	\$ 1.87
Granted	509,250	\$ 0.93
Vested	(321,400)	\$ 2.00
Canceled	(253,450)	\$ 1.18
Unvested, December 31, 2016	359,400	\$ 0.91

The unvested restricted shares as of December 31, 2016 are all performance-based restricted shares that will vest, subject to achievement of performance goals, on March 4, 2017. As of December 31, 2016, the estimated unrecognized stock-based compensation expense related to these unvested restricted shares subject to the achievement of performance goals was approximately \$78,000, all of which is expected to be recognized over a weighted average period of approximately two months.

Dividends

The Company has not paid any cash dividends during the years ended December 31, 2016 and 2015.

11. INCOME TAXES

The Company accounts for income taxes under the liability method. Under the liability method, deferred income taxes are recognized for the income tax consequences of "temporary differences" by applying enacted statutory income tax rates applicable to future years to differences between the financial statement carrying amounts and the income tax bases of existing assets and liabilities.

Income tax net expense comprises the following:

	Year Ended December 31,	
	2016	2015
Current:		
Federal	\$ -	\$ -
State	(13,480)	(12,821)
Total	<u>(13,480)</u>	<u>(12,821)</u>
Deferred:		
Federal	-	-
State	-	-
Total	<u>-</u>	<u>-</u>
Income tax net expense	<u>\$ (13,480)</u>	<u>\$ (12,821)</u>

Significant components of the Company's deferred income tax assets are as follows:

	December 31,	
	2016	2015
Reserves and accruals	\$ 1,053,863	\$ 1,578,374
Prepaid expenses	(43,774)	(50,966)
Federal NOL carryforwards	8,530,493	6,762,537
State NOL carryforwards	615,919	583,651
Hong Kong NOL carryforwards	995,566	995,566
Federal benefit on state taxes under uncertain tax positions	136,969	132,385
Stock-based compensation	342,294	481,917
Research tax credit	434,637	434,637
Alternative minimum tax credit	348,264	348,264
Contributions carryforward	35,100	33,582
Depreciation	(286,608)	(312,023)
Accrued rent	216,432	254,404
Loss on impairment of long-lived assets	53,042	52,226
Valuation allowance	(12,432,197)	(11,294,554)
Total	<u>-</u>	<u>-</u>
Total deferred income tax assets, net	<u>\$ -</u>	<u>\$ -</u>

A reconciliation between expected income taxes, computed at the statutory federal income tax rate of 34% applied to pretax accounting loss, and the income tax net expense included in the consolidated statements of operations for the years ended December 31, 2016 and 2015 is as follows:

	Year Ended December 31,	
	2016	2015
Anticipated income tax benefit at statutory rate	\$ 1,534,176	\$ 3,315,420
State income tax benefit, net of federal tax effect	(9,350)	35,814
Capital loss carryforward expiration	-	(9,227)
Income tax effect of uncertain tax positions	(8,896)	(8,461)
Return to provision adjustments	(23,070)	(82,341)
Stock-based compensation	(110,066)	(215,030)
Other changes in deferred income tax assets, net	(13,118)	(22,414)
Increase in valuation allowance	(1,383,156)	(3,026,582)
Income tax net expense	<u>\$ (13,480)</u>	<u>\$ (12,821)</u>

As of each reporting date, management considers new evidence, both positive and negative, that could impact its view with regard to future realization of deferred tax assets. As of December 31, 2016 and December 31, 2015, the Company's management determined that sufficient negative evidence continued to exist to conclude it was uncertain

that the Company would have sufficient future taxable income to utilize its deferred tax assets, and therefore, the Company maintained a valuation allowance against its deferred tax assets.

As of December 31, 2016, the Company had approximately \$882,000 of remaining federal income tax credits, \$533,000 of which expire between 2018 and 2021 and the balance without an expiration, which can be carried forward to offset future income taxes. As of December 31, 2016, the Company had federal tax net operating loss carryforwards under U.S. GAAP of approximately \$25.13 million, expiring between 2020 and 2036, which can be used to offset against future federal taxable income; North Carolina tax net operating loss carryforwards across all of the entities of approximately \$20.25 million expiring between 2023 and 2031; and various other state tax net operating loss carryforwards expiring between 2021 and 2036, which can be used to offset against future state taxable income.

As of December 31, 2016, there was approximately \$6.03 million in net operating loss carryforwards in Hong Kong. In accordance with the Hong Kong tax code, these amounts can be carried forward indefinitely to offset future taxable income in Hong Kong. The Company's deferred tax assets in Hong Kong were fully reserved with a valuation allowance of \$996,000 as of December 31, 2016 and 2015 and had been fully reserved in all prior periods due to the uncertainty of future taxable income in this jurisdiction to utilize the deferred tax assets.

Uncertain Tax Positions

The gross liability for income taxes associated with uncertain tax positions at December 31, 2016 was approximately \$532,000. This amount is shown net of approximately \$98,000 recorded as a direct reduction to the associated deferred tax asset. The gross liability, if recognized, would favorably affect the Company's effective tax rate.

The Company's policy for recording interest and penalties associated with tax audits is to record such items as a component of the provision for income taxes. For each of the years ended December 31, 2016 and 2015, the Company accrued approximately \$13,000 of interest and penalties associated with uncertain tax positions. Including the interest and penalties recorded for uncertain tax positions, there is a total of approximately \$165,000 of interest and penalties included in the accrued income tax liability for uncertain tax positions at each of December 31, 2016 and 2015. To the extent interest and penalties are not ultimately incurred with respect to uncertain tax positions, amounts accrued will be reduced and reflected as a reduction of the overall income tax provision.

In all of the significant federal and state jurisdictions where it is required to file income tax returns, the Company has analyzed filing positions for all tax years in which the statute of limitations is open. The only periods subject to examination by the major tax jurisdictions where the Company does business are the 2013 through 2015 tax years. The Company does not believe that the outcome of any examination will have a material impact on its consolidated financial statements and does not expect settlement on any uncertain tax positions within the next 12 months.

The following summarizes the activity related to the Company's gross liability for uncertain tax positions from January 1, 2015 through December 31, 2016:

Balance as of January 1, 2015	\$	506,463
Increases related to prior year tax positions		12,821
Balance as of December 31, 2015		519,284
Increases related to prior year tax positions		13,480
Balance as of December 31, 2016	\$	<u>532,764</u>

12. DISCONTINUED OPERATIONS

On March 4, 2016, the Company and Charles & Colvard Direct, LLC ("Direct") a wholly owned subsidiary of the Company, entered into an asset purchase agreement (the "Purchase Agreement") with Yanbal, pursuant to which Yanbal agreed to purchase certain assets of Direct (the "Transferred Assets"). The transactions contemplated by the Purchase Agreement also closed on March 4, 2016 (the "Closing Date"). The Company determined that the sale of these assets represented a strategic shift that will have a major effect on the Company's operations and financial

results. The Company made the decision to divest of these assets after careful analysis of the Company's core competencies, go-to-market strategies, and intent to advance toward profitability.

Pursuant to the terms of the Purchase Agreement, the Transferred Assets included, among other things, (i) an inventory credit to be used towards \$250,000 in existing non-moissanite and moissanite inventory as of the Closing Date, consisting of Direct's current jewelry offered under the "Lulu Avenue" trademarks, (ii) all existing marketing collateral such as packaging and catalogs for Direct's current jewelry offered under the "Lulu Avenue" trademarks as of the Closing Date, (iii) certain assigned contracts, (iv) style advisor and customer lists, and (v) all intellectual property rights owned by the Company and Direct and used solely in connection with the operation of Direct's direct-to-consumer home party business for the sale of fashion jewelry and related products and services in the United States, excluding the "Lulu Avenue" and "Love Knot" trademarks and other "Lulu Avenue" specific intellectual property such as the domain name www.luluavenue.com and all content located on such website (the "Lulu Intellectual Property"). The inventory credit and an exclusive, nontransferable license to use the Lulu Intellectual Property that was also granted to Yanbal on the Closing Date expired on July 31, 2016. After the Closing Date, the Company and Direct may not engage in the direct-to-consumer home party business and may not solicit style advisors or customers of the direct-to-consumer home party business. The Company had also agreed to provide to Yanbal certain transition services, which services ended August 31, 2016.

The purchase price for the Transferred Assets was \$500,000 with selling expenses of approximately \$131,000, resulting in a net purchase price of approximately \$369,000. The Company recorded a liability associated with \$35,000 of expense related to certain style advisor incentives and reduced prepaid expenses by \$60,000 related to contracts acquired by Yanbal.

The following table presents the major classes of line items constituting assets and liabilities related to discontinued operations:

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Prepaid expenses and other assets	\$ -	\$ 83,000
Total assets	<u>\$ -</u>	<u>\$ 83,000</u>
Accounts payable	\$ -	\$ 140,000
Accrued expenses and other liabilities	-	209,000
Total liabilities	<u>\$ -</u>	<u>\$ 349,000</u>

The following table presents the major classes of line items constituting pretax loss from discontinued operations:

	<u>Year Ended December 31,</u>	
	<u>2016</u>	<u>2015</u>
Net sales	\$ 804,585	\$ 5,073,825
Costs and expenses:		
Cost of goods sold	276,100	1,609,200
Sales and marketing	940,685	6,598,122
General and administrative	173,913	1,352,290
Interest expense	11	-
Total costs and expenses	<u>1,390,709</u>	<u>9,559,612</u>
Loss from discontinued operations	(586,124)	(4,485,787)
Other income:		
Gain on sale of long-term assets	12,398	-
Total other income, net	<u>12,398</u>	<u>-</u>
Pretax loss from discontinued operations	<u>\$ (573,726)</u>	<u>\$ (4,485,787)</u>

13. MAJOR CUSTOMERS AND CONCENTRATION OF CREDIT RISK

At times, a portion of the Company's accounts receivable will be due from customers that have individual balances of 10% or more of the Company's total net accounts receivable. The following is a summary of customers that represent 10% or more of total net accounts receivable as of December 31, 2016 and 2015:

	<u>December 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
Customer A	13%	**%
Customer B	*%	17%
Customer C	*%	14%
Customer D	*%	11%
Customer E	*%	10%

* Customers B, C, D, and E did not have individual balances that represented 10% or more of total net accounts receivable as of December 31, 2016.

** Customer A did not have an individual balance that represented 10% or more of the total net accounts receivable as of December 31, 2015.

A significant portion of sales is derived from certain customer relationships. The following is a summary of customers that represent greater than or equal to 10% of total gross sales for the years ended December 31, 2016 and 2015:

	<u>Year Ended December 31,</u>	
	<u>2016</u>	<u>2015</u>
Customer D	23%	25%
Customer F	17%	11%

The Company records its sales return allowance at the corporate level based on several factors including historical sales return activity and specific allowances for known customer returns.

14. EMPLOYEE BENEFIT PLAN

All full-time employees who meet certain age and length of service requirements are eligible to participate in the Company's 401(k) Plan. The plan provides for matching contributions by the Company in such amounts as the Board of Directors may annually determine, as well as a 401(k) option under which eligible participants may defer a portion of their salaries. The Company contributed a total of \$102,000 and \$120,000 to the plan during the years ended December 31, 2016 and 2015, respectively.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Interim Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2016. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, as ours are designed to do, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on such evaluation, our Chief Executive Officer and Interim Chief Financial Officer concluded that, as of December 31, 2016, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

We routinely review our internal control over financial reporting and from time to time make changes intended to enhance the effectiveness of our internal control over financial reporting. We will continue to evaluate the effectiveness of our disclosure controls and procedures and internal control over financial reporting on an ongoing basis and will take action as appropriate. During the three months ended December 31, 2016, we made no changes to our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, that we believe materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Our internal control system was designed to provide reasonable assurance to our management and Board of Directors regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Our internal control over financial reporting includes those policies and procedures that:

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

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to the reliability of financial reporting and the preparation of financial statements.

In making the assessment of internal control over financial reporting, our management used the criteria issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework (2013)*. Based on that assessment and those criteria, management determined that our internal control over financial reporting was effective as of December 31, 2016.

Item 9B. Other Information

Agreement with Former Chief Revenue Officer

In connection with the departure of Steve Larkin, our former Chief Revenue Officer, on January 10, 2017, we have entered into a Separation of Employment Agreement, or the Separation Agreement, with Mr. Larkin dated March 9, 2017. The terms of the Separation Agreement provide that Mr. Larkin has the right to revoke the Separation Agreement until March 29, 2017.

Under the Separation Agreement, in exchange for a standard release of employment claims, Mr. Larkin is entitled to receive severance in an amount equal to \$125,000 (less applicable withholdings) on the first payroll date following March 19, 2017, and \$65,000 (less applicable withholdings) payable in installments over three months. We will also pay a lump sum for COBRA premiums (less an amount equal to the active employee contribution, if any) for coverage of Mr. Larkin and his eligible dependents for six months if Mr. Larkin timely and properly elects continuation coverage. We have agreed to accelerate the vesting of 25,000 options previously granted to Mr. Larkin and to extend the exercise period of all of Mr. Larkin's outstanding options to January 10, 2022. We have also agreed to waive the forfeiture of 75,000 shares of restricted stock previously granted to Mr. Larkin and to cause the restrictions on such restricted stock to lapse effective January 10, 2017. The Separation Agreement contains certain confidentiality provisions and other customary terms and conditions. All of Mr. Larkin's obligations under his Employment Agreement with the Company, dated May 6, 2013, as amended, regarding confidentiality, non-competition, proprietary information, publication, and related matters will continue, except that the Separation Agreement slightly modified the non-competition provision.

Vesting of Awards Granted Under 2016 Senior Management Equity Incentive Program

On March 9, 2017, the Compensation Committee of our Board approved the vesting of certain restricted stock awards granted under the Charles & Colvard, Ltd. 2016 Senior Management Equity Incentive Program, or the 2016 Program. The 2016 Program provided that vesting of the awards was based on the achievement of both shared company goals, or the Company Measures, and individual performance goals, or the Personal Measures, and that certain of the Company Measures must be achieved in order for the awards to vest.

The Compensation Committee determined that, while the Company Measures had not been achieved, the Compensation Committee had not considered the impact of the sale of Lulu Avenue on the Company Measures. Therefore, as permitted by the 2016 Program, the Compensation Committee exercised its discretion to permit the vesting of the restricted stock awards based on the achievement of Personal Measures alone. As a result, the Compensation Committee approved the lapse of restrictions on a total of 124,200 shares of restricted stock granted under the 2016 Program, including 67,500 of the 150,000 shares of restricted stock granted to Suzanne Miglucci, our Chief Executive Officer. The remainder of the original awards of restricted stock was forfeited. Clint Pete, our Interim Chief Financial Officer, was not eligible to participate in the 2016 Program as he was appointed to his current position too late in the year.

PART III

- Item 10. Directors, Executive Officers and Corporate Governance**
- Item 11. Executive Compensation**
- Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**
- Item 13. Certain Relationships and Related Transactions, and Director Independence**
- Item 14. Principal Accounting Fees and Services**

The information called for in Items 10 through 14 is incorporated by reference from our definitive Proxy Statement relating to our 2017 Annual Meeting of Shareholders, which will be filed with the SEC within 120 days after the end of fiscal 2016.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a)(1) and (2). The consolidated financial statements and report of our independent registered public accounting firm are filed as part of this report (see “Index to Financial Statements,” at Part II, Item 8). The financial statement schedules are not included in this Item as they are either not applicable or the information is otherwise included in the consolidated financial statements or the notes to the consolidated financial statements.

(a)(3). The following exhibits have been or are being filed herewith and are numbered in accordance with Item 601 of Regulation S-K:

<u>Exhibit No.</u>	<u>Description</u>
2.1	Asset Purchase Agreement, effective March 4, 2016, by and among Yanbal USA, Inc., Charles & Colvard, Ltd., and Charles & Colvard Direct, LLC (incorporated herein by reference to Exhibit 2.1 to our Current Report on Form 8-K, as filed with the SEC on March 8, 2016)
2.2	List of Schedules Omitted from Asset Purchase Agreement included as Exhibit 2.1 above (incorporated herein by reference to Exhibit 2.2 to our Current Report on Form 8-K, as filed with the SEC on March 8, 2016)
3.1	Restated Articles of Incorporation of Charles & Colvard, Ltd. (incorporated herein by reference to Exhibit 3.1 to our Annual Report on Form 10-K for the year ended December 31, 2004)
3.2	Bylaws of Charles & Colvard, Ltd., as amended and restated, effective May 19, 2011 (incorporated herein by reference to Exhibit 3.1 to our Current Report on Form 8-K, as filed with the SEC on May 24, 2011)
4.1	Specimen Certificate of Common Stock (incorporated herein by reference to Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 1998)
10.1	Exclusive Supply Agreement, dated as of December 12, 2014, by and among Charles & Colvard, Ltd., Cree, Inc. and, solely for purposes of Section 6(c) of the Exclusive Supply Agreement, Charles & Colvard Direct, LLC and moissanite.com, LLC (incorporated herein by reference to Exhibit 10.1 to our Current Report on Form 8-K, as filed with the SEC on December 16, 2014)*
10.2	Letter Agreement, dated February 9, 2005 and effective February 21, 2005, between The Bell Group, d/b/a Rio Grande and Charles & Colvard, Ltd. (incorporated herein by reference to Exhibit 10.73 to our Current Report on Form 8-K, as filed with the SEC on February 23, 2005)*

- 10.3 Letter Agreement, effective July 11, 2008, between Samuel Aaron Inc. and Charles & Colvard, Ltd. (incorporated herein by reference to Exhibit 10.120 to our Current Report on Form 8-K, as filed with the SEC on July 17, 2008)*
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- 10.16 Form of Restricted Stock Award Agreement under the Charles & Colvard, Ltd. 2008 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.115 to our Current Report on Form 8-K, as filed with the SEC on June 2, 2008)+

- 10.17 Form of Employee Incentive Stock Option Agreement under the Charles & Colvard, Ltd. 2008 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.116 to our Current Report on Form 8-K, as filed with the SEC on June 2, 2008)+
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- 21.1 Subsidiaries of Charles & Colvard, Ltd.

- 23.1 Consent of BDO USA, LLP
- 31.1 Certification by Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 31.2 Certification by Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
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- 101 The following materials from Charles & Colvard, Ltd.'s Annual Report on Form 10-K for the year ended December 31, 2016 formatted in XBRL (eXtensible Business Reporting Language) and furnished electronically herewith: (i) Consolidated Balance Sheets; (ii) Consolidated Statements of Operations; (iii) Consolidated Statements of Shareholders' Equity; (iv) Consolidated Statements of Cash Flows; and (v) Notes to Consolidated Financial Statements.
- * Asterisks located within the exhibit denote information which has been redacted pursuant to a request for confidential treatment filed with the SEC.
- + Management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

CHARLES & COLVARD, LTD.

March 9, 2017 By: /s/ Suzanne Miglucci
Suzanne Miglucci
President and Chief Executive Officer

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

March 9, 2017 By: /s/ Suzanne Miglucci
Suzanne Miglucci
Director, President and Chief Executive Officer

March 9, 2017 By: /s/ Clint J. Pete
Clint J. Pete
Interim Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

March 9, 2017 By: /s/ Neal I. Goldman
Neal I. Goldman
Executive Chairman of the Board of Directors

March 9, 2017 By: /s/ Anne M. Butler
Anne M. Butler
Director

March 9, 2017 By: /s/ Jaqui Lividini
Jaqui Lividini
Director

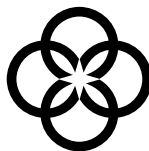
March 9, 2017 By: /s/ Ollin B. Sykes
Ollin B. Sykes
Director

EXHIBIT INDEX

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CHARLES & COLVARD®

THE ORIGINAL CREATED MOISSANITE™

Investor Relations:
Christopher Schreiber
Taglich Brothers
800.456.1220
cs@taglichbrothers.com

cautionary note:

The annual report contains forward-looking statements relating to the company's business. Our business is subject to numerous risks and uncertainties, which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. We refer you to our Annual Report on Form 10-K for a discussion of such risk and uncertainties.