CHARLES & COLVARD LTD
Form 10-K405
March 25, 2002

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

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FORM 10-K

(Mark One)
[x] Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the fiscal year ended December 31, 2001

[ ] Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the transition period from ________________to__________________

Commission File Number: 000-23329

Charles & Colvard, Ltd.

(Exact name of Registrant as specified in its charter)

| | |
|---|---|
| North Carolina | 56-1928817 |
| (State or other jurisdiction of incorporation) | (I.R.S. Employer Identification No.) |
| 3800 Gateway Boulevard, Suite 310, Morrisville, N.C. | 27560 |
| (Address of principal executive offices) | (Zip Code) |

Registrant's telephone number, including area code: (919) 468-0399

Securities registered pursuant to Section 1 2(b) of the Act:

None

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

Common Stock, no par value per share

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 X 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 [X].

The aggregate market value of the voting stock held by non-affiliates of the Registrant as of February 28, 2002 was $30,406,896. On February 28, 2002 there were 13,371,714 outstanding shares of the Registrant's common stock.

DOCUMENT INCORPORATED BY REFERENCE

Certain portions of the Proxy Statement of the Registrant for the Annual Meeting of Shareholders to be held on May 20, 2002 have been incorporated by reference into Part III of this Annual Report on Form 10-K.

## FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements that relate to any plans, objectives, estimates and goals. Words such as "expects," "anticipates," "intends," "plans," "believes" and "estimates" and variations of such words and similar expressions identify such forward-looking statements. Our business is subject to numerous risks and uncertainties, including variability in our quarterly operating results, an undeveloped market for our products, limited distribution channels and our dependence on third parties. These and other risks and uncertainties, many of which are addressed in more detail below in the sections entitled "Business Risks" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," could cause our actual results and developments to be materially different from those expressed or implied by any of these forward-looking statements.

# Part I

## ITEM 1. BUSINESS

### Introduction

We are Charles & Colvard, Ltd., a North Carolina corporation that manufactures, markets and distributes Charles & Colvard created moissanite jewels (also called moissanite or moissanite jewels) for sale in the worldwide jewelry market. Moissanite, also known by its chemical name, silicon carbide (SiC), is a rare, naturally occurring mineral found primarily in meteorites. As the sole manufacturer of scientifically-made moissanite jewels, we are creating a unique brand image which positions moissanite as a jewel in its own right, distinct from all other jewels based on its fire, brilliance, luster, durability and rarity.

Our moissanite jewels are made from SiC crystals grown by Cree, Inc. Cree has an exclusive license to a patent related to a process for growing large single crystals of SiC. We know of no other producers of SiC that could currently supply lab-grown SiC crystals in qualities, sizes or volumes suitable for use as moissanite jewels. We have certain exclusive licenses and supply rights with Cree for SiC materials to be used for gemstone applications.

From our inception in June 1995 through June 30, 1998, we were a development stage enterprise, devoting our resources to fund research and development of colorless, scientifically made moissanite jewels. We began shipping moissanite to domestic retail jewelers and international distributors during the second quarter of 1998. At that time, we launched limited consumer-focused advertising and promotion activities.

Through the first half of 1999, we limited our efforts to expand the distribution of moissanite jewels as a result of insufficient product availability and our lack of confidence in the quality of the SiC crystals we were receiving. Late in the second quarter of 1999, we began to receive indications that the quality of the SiC crystals was improving rapidly. The rate of improvement in the quality of the SiC crystals continued to accelerate through the end of 1999, far exceeding our expectations. At the same time, we experienced a decline in sales of moissanite jewels during the third quarter of 1999 as a result of the following:

- a slow growth in the addition of domestic retailers;
- lack of targeted retailer-driven marketing programs abroad; and
- poor overall jewelry market performance in certain international markets.

The improved supply of SiC crystals along with the decrease in sales led to a significant increase in inventories of moissanite jewels. In December 1999, we rescheduled approximately 50% of the expected shipments of SiC crystals from Cree from the first half of 2000 to the second half of 2000. Inventory



increased to $23.1 million at December 31, 2000. In addition, in December 2000, we agreed with Cree on a framework for 2001, pursuant to which we were obligated to purchase SiC crystals only upon issuance and Cree's acceptance of purchase orders. Inventory decreased during 2001 by $1.7 million. Dependent upon the quality of material received, purchases from Cree during 2002 will be between $900,000 and $3.7 million.

With the improvements in the supply of saleable moissanite jewels, we launched our strategic global marketing program in the fourth quarter of 1999 to spur consumer awareness of moissanite jewels. During 2001, this program was refocused to emphasize use of public relations activities to increase consumer brand awareness while reducing higher cost print and media advertising. In addition, in March 2000, we entered into distribution agreements with Stuller Settings, Inc. (Stuller) and Rio Grande, two of the largest suppliers of jewelry-related products to the jewelry industry, for the North American distribution of moissanite. We have also entered into several agreements with domestic jewelry manufacturers, one of which sells to ShopNBC, a TV home shopping channel, which since September 2001 is selling moissanite jewels on the air. During 2001, 10 hours of programming was dedicated to moissanite jewelry. Through these agreements with Stuller, Rio Grande and jewelry manufacturers and the brand awareness created by our marketing program, our goal is to rapidly increase the introduction of moissanite into the domestic jewelry market while maintaining average selling prices.

We made significant investments in our branding program and in developing our manufacturing and operational infrastructures during the fourth quarter of 1999 and through 2000, all in anticipation of future significant and rapid growth. During the third and fourth quarters of 2000, we restructured our operations to reduce our overall general and administrative expense levels in order to conserve cash and attempt to position the Company to achieve profitability in the future. Additionally, research and development expenses under the Development Agreement with Cree were suspended from January 2001 through December 31, 2002.

Our strategy for 2001 was to become profitable during the year by achieving modest growth in sales while reducing marketing and advertising costs, maintaining our lower general and administrative expense levels and curtailing research and development expenses. We succeeded in achieving profitability and positive cash flow from operations in 2001, while sales declined slightly. Our strategy for 2002 is to achieve sales growth, primarily in the domestic market, and to maintain profitability. The domestic distribution of moissanite expanded into additional retail stores (including our first retail chain), catalog sales, and home shopping channels. Domestic sales accounted for approximately 82% of total sales. In 2002, we will continue to expend the majority of our resources on the domestic market. However, we will invest resources in certain international markets that show the most potential. We believe that our sales can increase as the distribution of moissanite jewels expands domestically and internationally. Our management believes that our current infrastructure and stage of product development can support a significant growth in sales. Although our goal is to increase sales and remain profitable in 2002, we cannot be sure that we will achieve or sustain sales increases or profitability.

## The Jewelry Market

In 2001, the consumer market for fine and costume jewelry sales in the United States was approximately $40.0 billion. Worldwide jewelry sales have historically been 2.5 times larger than in the U.S.

Diamond Jewelry. In 2000, rough diamond imports worldwide were 7.4 billion carats. Over 90% of the diamond jewelry pieces sold domestically used settings other than engagement rings (i.e., pendants, bracelets, other rings, earrings, etc.).

Distribution Channels. Traditionally, consumers have purchased jewelry through independent and chain jewelry stores and department stores. However, in the past two decades, non-traditional distribution channels such as catalog showrooms, mass-market discounters, price clubs, mail order, TV shopping



channels and electronic commerce on the Internet have emerged. Moissanite is sold to consumers through single and multiple location independent jewelry stores, a jewelry store chain, a TV shopping channel and in catalogs.

## Moissanite

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

It is generally accepted that, in addition to carat size, the most important characteristics of a gemstone are beauty, durability and rarity. The beauty of a gemstone is determined by its color, brilliance, "fire" and luster. The brilliance of a gemstone is measured by its refractive index, or the extent, when coupled with the facet design, to which the gemstone reflects light. The "fire" of a gemstone, or the breaking of light rays into the spectrum of colors, is measured by its dispersion. Luster is the amount of light that is reflected back to the observer from the surface of the gemstone. The durability of a gemstone is determined by its hardness, or resistance to scratching, and its toughness, or resistance to chipping or cleaving. The gemstone's hardness also determines the extent to which brilliance and "fire" can be highlighted by cutting with sharp, highly polished facets. Rarity is the availability or perceived availability of a gemstone.

Moissanite jewels have unique fire, brilliance, luster, durability and rarity. The refractive index and dispersion of moissanite jewels are higher than those found in other fine gemstones. We believe that the hardness of moissanite jewels is greater than all known gemstone materials except diamond. As a result, moissanite jewels, like diamond, can be cut with sharp, highly polished facets that accentuate their brilliance and "fire." The cutting specifications for moissanite jewels are designed to maximize the brilliance and fire inherent in 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 very rare natural occurrence of moissanite and the proprietary and technical limitations in producing mass quantities of jewel quality moissanite, we believe that moissanite is among the rarest of jewels.

In addition, other physical properties of moissanite jewels compare favorably to fine gemstones and will aid in jewelers' acceptance of our products. Moissanite jewels, like diamond, can withstand high temperatures, which allows jewelers to make extensive repairs to the jewelry setting without removing the jewel and to use the same basic methods that are used to repair diamond jewelry.

Because of its unique atomic structure, moissanite can be grown in a variety of colors including blue, green or yellow. Additionally, although none have been produced to date, the color red is theoretically possible to grow. To date, we have focused our development, manufacturing and distribution efforts on the colorless form of moissanite although we have sold limited quantities of green moissanite.



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

Comparison Chart (1)

| Description | Hardness (Mohs Scale) (2) | Toughness | Refractive Index | Dispersion |
|---|---|---|---|---|
| Diamond | 10 | Excellent* | 2.42 | .044 |
| C&C Created Moissanite (3) | 9.25-9.50 | Excellent | 2.65-2.69 | .090-.104 |
| Sapphire & Ruby | 9 | Excellent | 1.76-1.78 | .018 |
| Emerald | 7.5 | Poor to Good | 1.56-1.60 | .014 |

*Except in cleavage directions.

1. Sources: Gemological Institute Of America, *Gem Reference Guide For The 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* 891-906 (4th Ed. 1994); 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-Boemstein 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, 1999, 425-438; Kurt Nassau.

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 gemstones are approximately one-half to one-third as hard as diamond.

3. With the exception of the "Moissanite: A New Synthetic Gemstone Material" and "Synthetic Moissanite: A New Diamond Substitute" articles, the physical properties of moissanite jewels set forth in the preceding table utilized materials from SiC crystals produced by parties other than Cree or us. These crystals had various sizes, colors and atomic structures that we believe made them unsuitable for use as a gemstone. We have conducted tests on the hardness, toughness and refractive index of samples of our jewels, and the results of these tests are consistent with the results reported in this table. Because we, through development programs with Cree, continue to work toward improved quality of SiC crystals, the specific properties of the moissanite jewels that may eventually be commercialized are not now known. However, we believe that the physical properties of our moissanite jewels will fall within the ranges of the moissanite shown in this table.

Products and Product Development

Moissanite Jewels. We primarily sell colorless moissanite jewels cut in a variety of shapes including round, princess, radiant, oval, marquise, pear and trillion shapes in sizes ranging from 2 to 10mm (approximately .03 to 3.1 carats). We have also distributed a limited quantity of green moissanite jewels to evaluate the market potential of colored moissanite. We may elect to offer, from time to time, additional cuts, sizes or colors of moissanite jewels.

Amended and Restated Exclusive Supply Agreement with Cree. On June 6, 1997, we entered into an Amended and Restated Exclusive Supply Agreement (Exclusive Supply Agreement) with Cree pursuant to which we have agreed to purchase from Cree at least 50%, by dollar volume, of our SiC crystal requirements for the production of gemstones in each calendar quarter during the term of the Agreement and Cree has agreed to supply this amount of crystals to us. Although we are obligated to purchase only



50% of our requirements from Cree, we do not believe there are currently any other alternative sources of supply for SiC crystals suitable for gemstones. Therefore, at the present time, we are dependent on Cree as our sole source of supply of lab-grown SiC crystals. Under the Exclusive Supply Agreement, Cree has agreed not to sell SiC crystals for gemstone applications to anyone other than us. In January 2002, we agreed with Cree on a framework for purchases of SiC crystals during 2002. We will be obligated to purchase a minimum quantity of usable material on a quarterly basis if Cree meets certain quality levels, at a specific price per gram of usable material, which fluctuates based on quality. Dependent upon the quality of material received, purchases from Cree during 2002 are expected to be between $900,000 and $3.7 million.

Under the terms of the Exclusive Supply Agreement, when our orders for SiC crystals exceed the capacity of the existing crystal growth systems, Cree may, at its sole discretion, require us to purchase the additional growth systems needed or fund the cost of the systems on its own and recoup its costs by incorporating the costs of the additional systems into the cost of the SiC crystals. If we fund the costs of the crystal growth systems, Cree must use 100% of the output from these systems for our needs, unless the excess production exceeds our then-current needs, in which case Cree may sell such SiC crystals to any of its other customers for any use other than jewel applications. The title to these crystal growth systems passes to Cree once we have fully depreciated them. In May 2000, we sold our crystal growth equipment to Cree for $5 million. If Cree elects to fund the cost of additional growth systems on its own, we have no assurance that Cree will sell all of the output from these crystal growth systems to us or fill all of our orders, but Cree will be obligated to use the capacity to supply the quantities that we are required to purchase. Additionally, when Cree adds new crystal growth systems, we must commit to purchase all of the output of the new systems for at least six months. Any delay or reduction in the availability of SiC crystals could delay or limit our ability to deliver and sell our moissanite jewels, which would have a material adverse effect on our operating results.

The Exclusive Supply Agreement also restricts us from entering into numerous types of arrangements with certain parties. See "Marketing and Distribution -- Distribution." The Agreement has an initial term through June 2005, which may be extended for an additional ten years by either party if an order threshold is met. We have met this order threshold and expect to extend the term of the Agreement.

Amended and Restated Development Agreement with Cree. On July 1, 1998, we entered into an Amended and Restated Development Agreement (Development Agreement) with Cree in order to increase the yield of useable material in each SiC crystal manufactured by Cree for use in the production of moissanite jewels. In June 1998, Cree began to produce 2-inch crystals, and in March 1999 Cree produced a 3-inch crystal meeting mutually agreed upon volumes of useable material. A 3-inch crystal can produce approximately twice as many moissanite jewels as a 2-inch crystal with the same percentage yield of useable material. Future activities under the development program will focus on further improving the manufacturing. The Development Agreement establishes performance milestones, primarily focused on yield improvement, and contemplates that we, along with Cree, will revise the performance milestones annually to provide both parties with more flexibility to pursue further color and yield improvements on both 2-inch and 3-inch diameter crystals. Our funding obligations under the Development Agreement were suspended from January 2001 through December 31, 2002, and will be terminated upon our purchasing in 2002 the minimum quantity of material under the Supply Agreement. We did not spend any funds under the development arrangements with Cree in 2001, and we spent $1.4 million in 2000 and $2.4 million in 1999.

Moissanite/Diamond Test Instrument. Jewelry industry employees commonly rely on gemstone test instruments using thermal properties to distinguish diamond from other gemstones or diamond simulants such as synthetic cubic zirconia. Because the thermal properties of moissanite jewels are relatively close to those of diamond, such instruments have not reliably differentiated between diamond and moissanite jewels. Although gemologists trained in the physical properties of moissanite jewels may find a number of ways to distinguish moissanite from diamond, we believe that a moissanite/diamond test instrument must be available to jewelers and pawnbrokers to help prevent fraud.

Our moissanite/diamond test instrument, the Tester Model 590, which distinguishes moissanite jewels from diamonds in the colors and clarities most commonly sold by retail jewelers, is used in conjunction with existing thermal test instruments. A number of other companies have introduced devices that claim to distinguish moissanite jewels from diamonds at retail prices comparable to the Tester Model 590. We cannot be sure that a significant market will develop for our test instrument, that other competing devices will not be introduced or that other readily available means will not be developed to effectively distinguish moissanite jewels from diamond.

We have achieved our goal of assuring a reliable means for the jewelry industry to distinguish moissanite from diamond. Therefore, we are seeking other distribution opportunities for the test instrument to allow us to focus primarily on the marketing and distribution of moissanite jewels.

Moissanite/Diamond Test Instrument Component. Under an Instrument Agreement dated February 12, 1996, Cree is the sole supplier of a proprietary component used in our Tester Model 590. Under the Instrument Agreement, which expires in 2016, we are obligated to purchase all of our requirements for that component from Cree, and Cree must sell those components exclusively to us. In addition, we are obligated to pay Cree a royalty of 2.5% of net sales of all test instruments incorporating the Cree component. Although to date Cree has supplied a sufficient quantity of this component, if Cree were to fail to deliver this component, as required, we would not be able to manufacture additional test instruments.

Intellectual Property

Intellectual Property of the Company. We have U.S. product and method patents for moissanite jewels, expiring in 2015, under which we have broad, exclusive rights to manufacture, use and sell moissanite jewels in the United States. We have pending applications for these same patents in a number of foreign jurisdictions. In addition, we have a U.S. apparatus and method patent for the Tester Model 590, expiring in 2016, that covers the physical structure and the testing techniques employed in the Tester Model 590. This patent gives us exclusive rights to manufacture and sell the Tester Model 590 in the United States. We also have other patents and patent applications pending related to certain methods of producing moissanite jewels and related technologies. In addition, we have certain trademarks and pending trademark applications that support the Charles & Colvard moissanite branding strategy. Although we intend to enforce our patent and trademark rights and vigorously prosecute all our patent applications, we cannot be sure that such actions will be successful, that any additional patents will be issued, that any issued patent will not be challenged, invalidated or circumvented or that any issued patent will have any competitive or commercial value.

Our success and our ability to compete successfully depends heavily upon our proprietary technology. In addition to our patents and pending patents, we rely on trade secret laws and employee, consultant and customer confidentiality agreements to protect certain aspects of our technology. We cannot be sure that we will be able to protect our proprietary technology from disclosure or that others will not develop technologies that are similar or superior to our technology.

While we have not received any claims that our products or processes infringe on the proprietary rights of third parties, we have no assurance that third parties will not assert such claims against us with respect to our existing and future products. 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.

Proprietary Technology of Cree. Cree, our current source for development and supply of lab-grown SiC crystals, has developed or licensed numerous proprietary processes for the growth of SiC crystals for use in semiconductor, laser and other applications. Our founders recognized the potential use of SiC as a moissanite jewel and obtained the exclusive right to purchase SiC crystals from Cree for moissanite jewels and gemological instrumentation. We believe that Cree is currently the only producer of SiC crystals in sizes and qualities suitable for commercial production of moissanite jewels. Cree has significant proprietary rights related to its processes for growing SiC crystals, including an exclusive license on a patent for a process of growing large single crystals of SiC. This patent expires in years ranging from 2006 to 2011, depending on the country in which issued. In addition, Cree has a patent for a process for growing colorless SiC and other patents relating to certain aspects of its SiC crystal growth process. To further protect its proprietary SiC crystal growth process, Cree internally produces the crystal growth systems used to produce its SiC crystals. We have a royalty-free, perpetual license to use the technology covered by Cree's colorless SiC patent in moissanite jewel applications.

We depend heavily for our success on Cree's technology and ability to successfully produce SiC crystals suitable for the production of Charles & Colvard created moissanite.

Manufacturing

The production of moissanite jewels includes the following steps:

- growing SiC crystals;
- designing shapes with proportions unique to moissanite jewels;
- cutting crystals into preforms that will yield jewels of an approximate carat weight and millimeter size;
- faceting preforms into jewels; and
- inspecting, sorting and grading faceted jewels.

Growth of SiC Crystals. Cree grows SiC crystals for us in accordance with the terms of the Exclusive Supply Agreement, as amended. Under the Exclusive Supply Agreement, Cree is required to sell to us all of the crystals grown in a specified number of crystal growth systems without charging us for such crystal growth systems. In addition, Cree must sell to us all the crystals grown in the crystal growth systems acquired by us from Cree, unless Cree's capacity exceeds our then-current needs, in which case Cree may sell SiC crystals produced by these systems to any of its other customers for any use other than moissanite jewel applications. Currently, we are not using 100% of our available crystal growth capacity at Cree. We may increase our production capacity from Cree upon appropriate notice to Cree. If we order a quantity of crystals that will require Cree to acquire additional crystal growth systems, Cree may elect, in its sole discretion, to have us purchase the additional growth systems that will be needed or to fund the costs on its own and recoup its costs by incorporating the costs of the systems into the cost of the SiC crystals sold to us.

We routinely evaluate the yield and quality of saleable moissanite jewels from SiC crystals being produced by Cree. The yield of saleable moissanite jewels from each crystal is the most significant factor affecting the volume and cost of moissanite jewels available for sale. Yield of saleable moissanite jewels is dependent on the quality of the crystals. Improvements in crystal quality increase the volume, or yield, of moissanite jewels from a crystal and decrease the cost of each moissanite jewel produced.

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From mid-1999 to mid-2000, Cree showed marked improvement in SiC crystal quality, resulting in an increased yield of saleable jewels from both 2-inch and 3-inch diameter crystals that far exceeded our expectations. Beginning in mid-2000, as we reduced our production with Cree, the crystal quality stabilized.

Designing Shapes with Proportions Unique to Moissanite Jewels. Maximizing the light reflecting from a faceted moissanite jewel requires the design of shapes with unique proportions and angles. We create proprietary designs, using computer modeling, to display the maximum light reflection based on the optical properties (i.e., refractive index, dispersion and luster) of moissanite jewels. The first shape we developed applying these computer models was a unique version of the round brilliant cut. Most recently, we have designed oval, marquise, pear and heart fancy shapes that eliminate dark areas commonly found in other gemstones with similar cuts. We believe these proprietary designs are the basis for the superior optical performance quality observed in faceted moissanite jewels.

Preforms. We divide all SiC crystals through slicing and dicing processes into preforms in sizes suitable for faceting into predetermined calibrated-size moissanite jewels. We use readily available automated and computerized equipment along with proprietary technology developed in-house to slice and dice crystals into preforms. We believe that this equipment will enable us to maximize the number of preforms we can obtain from each SiC crystal.

Faceting Moissanite Jewels. The faceting of preforms is a critical stage in obtaining quality jewels. The techniques and skills used in faceting moissanite jewels differ somewhat from those used in faceting diamonds and other gemstones. We currently outsource the faceting of our moissanite jewels, other than faceting for research and product development purposes, which we conduct internally. We have three suppliers of volume faceting services, all located in Asia, and we have been satisfied with the capabilities and performance of these three suppliers. During 2002, we intend to source faceting services primarily from two of these existing suppliers, and we will depend on their ability to provide an adequate quantity of quality faceted moissanite jewels. We cannot be sure that they will be able to continue to produce our quality specifications for faceting and meet our quantity and time requirements.

We have entered into a multi-year agreement with our primary supplier of faceting services, John M. Bachman, Inc. (JMB). Pursuant to this agreement and related amendments, we advanced $380,000 to JMB to expand the production facilities of its affiliate which facets our moissanite jewel preforms. This advance was completely repaid in 2001. We have a right of first refusal to acquire any excess gemstone cutting capacity from JMB's affiliate and any equity securities offered by JMB or its affiliate. The term of our agreement with JMB is through December 31, 2003; however, we have the right to terminate the agreement at any time upon 90 days written notice. Under this agreement, JMB has agreed to grant, and to cause its affiliates to grant, to us a perpetual, non-exclusive, royalty-free license to use any inventions or proprietary information developed by or for JMB or its affiliates that is useful in the faceting of moissanite jewels.

Inspection, Sorting and Grading. Once faceted moissanite jewels are returned to us, we inspect, sort and grade them. During this stage, specially trained personnel individually examine and grade each moissanite jewel against certain quality parameters. In addition, we process a sample of each batch through an image analyzer for exacting quality control. 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 an independent third party. Any third parties to which these processes are outsourced will be required to adhere to our rigorous quality control and monitoring standards. We have no assurance that we will be able to hire or retain sufficient numbers of appropriately skilled personnel for this phase of manufacturing, find and enter into acceptable agreements with third party vendors or that such vendors will be able to provide accurate inspection, sorting and grading services on a timely basis.



Moissanite/Diamond Test Instrument. We contracted with an unaffiliated third party for the assembly of our moissanite/diamond test instrument from components produced by third parties. The initial production runs are complete, and we believe that, except for a component containing a proprietary semiconductor chip made by Cree, the components and assembly functions would be readily available from a wide variety of other suppliers for additional production volumes.

Marketing and Distribution

Marketing

Domestic. We continued to expand distribution channels throughout 2001, and we are receiving valuable feedback from both our distribution and manufacturing partners as how to refine our marketing to address both retail jewelers and consumers. Beginning late in the third quarter of 2001, we executed a global marketing strategy focusing on advertising to our target consumer (working females 25-55) in the US. We focused that advertising on print advertising in high-end fashion magazines.

We believe our 2001 marketing and advertising strengthened the image and reputation of moissanite and Charles & Colvard, and while we did not receive an immediate or direct increase in our sales, the advertising helped educate consumers about moissanite, while directing them to retailers (brick and mortar as well as on-line) to purchase. The advertising also encouraged more retailers to carry the product and provided support to our existing customers. We believe that the marketing and advertising program resulted in a consistent and positive message for moissanite and set the stage for our future public relations and advertising efforts, positioning moissanite as a unique and desirable product in a crowded jewelry marketplace.

Public relations activities have been an integral and important component of our marketing strategy. Key public relations activities in 2001 included the following:

- developing relationships with various celebrities to wear jewelry featuring Charles & Colvard created moissanite jewels;
- generating coverage in fashion and popular press; and
- developing news stories to be carried on local television news programs.

We believe that the value of celebrities wearing moissanite is their trend-setting ability and that these individuals will expand awareness among influential Hollywood celebrities, drive consumer demand and help us in our efforts to expand distribution.

Our press coverage during 2001 included television stories, newspaper articles and magazine articles (consumer, jewelry trade and marketing trade). For example, in 2001 moissanite jewels were featured in Fortune, People, Platinum, Elle, Marie Claire, Black Men, Playboy, The Wall Street Journal, USAToday, ABC's 20/20, E! Entertainment, Lifetime Now, The History Channel, Extra! and numerous ABC, NBC and CBS television affiliates. The corresponding gross consumer impressions from this coverage in 2001 are expected to have exceeded 56 million in the U.S. alone.

Our domestic goal for 2002 is to create more consumer impressions for moissanite than were achieved in 2001, without significantly increasing the public relations budget. We will focus on public relations programs concentrating on grassroots marketing and thought leadership with women influential to our target market. Additionally, we will continue to focus on generating consumer impressions through newspaper and magazine articles and television news segments.

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We have also planned on-going, focused advertising in National Jeweler, JCK Magazine and similar jewelry trade publications during 2002. In addition, we have participated or plan to participate in the following jewelry trade shows for the first half of 2002:

- JCK Orlando (late January)
- Professional Jeweler, Fine Jewelry Show at Tucson (early February)
- SJTA, Atlanta Jewelry Show (late February)
- JCK Las Vegas (early June)

International. Internationally, we work with our distributors to develop appropriate advertising and marketing campaigns targeting specific geographic regions, building on the marketing themes developed in the US. Pursuant to our international distribution agreements, we provide co-op incentives to use approved advertising that supports the brand image for moissanite created by Charles & Colvard. The exclusive distributors are responsible for all advertising and marketing efforts and expenses in their territories. We may provide other advertising and promotion incentives in other international markets to grow jewelry trade and consumer awareness.

We plan to advertise to the international jewelry trade in Jewelry News Asia. During the first half of 2002, we plan to participate in Messe Basel, the largest and most prestigious international jewelry show.

Distribution

Domestic. We believe that moissanite is best sold through retail channels in which the retailer has an adequate opportunity to effectively educate the consumer on moissanite's unique qualities.

We began shipping moissanite to our authorized retail jewelers in Atlanta and Miami/Ft. Lauderdale during the second quarter of 1998, and, in July 1998 we launched limited consumer-focused advertising and promotion activities in those areas. During the second half of 1998, and through the first half of 1999, we limited our efforts to expand the distribution of moissanite jewels as a result of insufficient product availability and our lack of confidence in the quality of the SiC crystals we were receiving. As our confidence in our supply of moissanite increased, we attempted to expand the number of retailers carrying moissanite during the second half of 1999. However, we were not able to increase the number of these jewelers necessary to achieve our business objectives.

By the end of 1999, 237 domestic independent jewelers were carrying Charles & Colvard created moissanite. Sales in 1999 to our independent jewelers totaled approximately $4.1 million. In order to more rapidly expand the distribution of moissanite, in May 2000 we transitioned from selling moissanite jewels directly to independent retail jewelers to allowing independent retail jewelers to access loose moissanite jewels and moissanite jewelry through respected, established jewelry distributors. We have entered into distribution agreements for North America with two large distributors, Stuller Settings, Inc. (Stuller) and Rio Grande, and certain jewelry manufacturers. Established in 1970, Stuller is one of the world's largest suppliers of jewelry-related products, providing over 100,000 different items to the jewelry industry. Through its innovative manufacturing and distribution techniques, Stuller provides timely delivery of its products to over 40,000 retail jewelry customers, primarily in North America. Stuller's products include findings (jewelry ready to have a gemstone mounted in it), finished jewelry, loose diamonds, colored gemstones, tools and supplies and metals. Rio Grande was started over 50 years ago and is a respected industry leader in jewelry manufacture and distribution. Rio Grande carries over 24,000 products for the jewelry trade, and the Rio Grande Gems & Findings catalog is the largest catalog of its type in the world. Rio Grande's customer-base consists primarily of manufacturers of jewelry from independent jewelers that create custom jewelry to the largest manufacturers of jewelry in North America.



Additionally, we have entered into arrangements with several jewelry manufacturers that design and manufacture lines of jewelry containing moissanite jewels. We have granted these jewelry manufacturers non-exclusive rights to sell their lines of jewelry to independent retail jewelers as well as jewelry store chains and department stores that meet certain predetermined criteria. Jewelry retailers have access to loose moissanite jewels from Stuller and Rio Grande and to jewelry containing moissanite jewels from Stuller and these jewelry manufacturers.

We believe that moissanite jewels provide retailers with an opportunity to earn a profit margin comparing favorably to other jewelry products and allow the retailer to distinguish our product line from other jewelers in the highly competitive retail jewelry market. We also believe these margins create incentives for retailers to maximize their sales and promotional efforts, resulting in additional consumer demand for our moissanite jewels.

We believe that distributing moissanite jewels through Stuller and Rio Grande as well as certain jewelry manufacturers and designers provides retail jewelers with maximum flexibility to develop their businesses with moissanite. Those jewelers that prefer to create their own jewelry to meet the needs of their individual market areas will be able to purchase the loose jewels through Stuller or Rio Grande, with which many of them already have relationships. Those jewelers that wish to purchase finished jewelry for sale in their store may do so either through Stuller or any of the jewelry manufacturers working with moissanite.

The quality, design and workmanship of the settings chosen by Stuller, manufacturers, designers and retailers affects consumer perception and acceptance of our products, and our control over these elements is limited to our pricing policy. Beyond that, we believe that the success of Charles & Colvard created moissanite will be determined by the power and the precision of our brand-building program. We continue to evaluate the most appropriate structure for distribution in North America and may, in certain circumstances, enter into additional distribution arrangements, including arrangements with selected department stores and distribution channels such as moissanite retail stores, catalog sales or Internet sales.

In September 2001, we participated in a test with a leading national home shopping TV network, "ShopNBC". Based on the results in September and subsequent tests in October and November, ShopNBC expanded the hours we were aired on in December, and it has continued selling moissanite jewelry into 2002. We sell moissanite jewels to jewelry manufacturers who set the jewels and sell the finished jewelry to ShopNBC. In conjunction with ShopNBC, we have advertised the airing of these shows in both national and regional newspapers.

International. We currently distribute moissanite jewels in substantially all of Western Europe and certain territories in Southeast Asia. We have approximately 39 international distributors and intend to increase this number. All sales to international customers are denominated in U.S. dollars. Generally, we require full payment before merchandise is shipped to these customers. However, once a customer has established a purchase history, we may grant net 30 day payment terms to our international customers. Export sales aggregated approximately $2.1 million, $4.6 million, and $6.7 million in 2001, 2000, and 1999, respectively.

The Exclusive Supply Agreement with Cree prohibits us, without Cree's consent, from entering into an exclusive marketing or distribution agreement with DeBeers or any party that Cree reasonably believes is affiliated with any of the following parties:

- DeBeers;
- the Central Selling Organization (the international cartel of diamond producers);



- any party whose primary business is the development, manufacture, marketing or sale of diamond gemstones; or
- any non-gemstone and non-jewelry industry competitor of Cree.

These provisions may limit our potentially available avenues of distribution and could prevent us from entering into certain potentially profitable transactions.

Diamond/Moissanite Test Instrument. We sell our moissanite/diamond test instrument directly to jewelers, gemologists and pawnbrokers through direct mailings, advertisements in trade publications and at trade shows. We shipped approximately 647 instruments in 2001. In addition, we have retained non-exclusive distributors to distribute the test instrument in some U.S. markets and through exclusive distribution agreements in certain territories internationally. We may enter into other distribution agreements or may license, form joint ventures or sell certain rights to the test instrument as we deem appropriate.

Competition

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 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.

Our moissanite jewel, which is positioned as a unique new jewel, may compete with fine gemstones such as ruby, sapphire, emerald and tanzanite as well as with natural and treated diamonds and existing synthetic gemstones such as synthetic cubic zirconia. We may also face competition from additional gemstones such as synthetic diamonds, synthetic diamond films and other sources of synthetic moissanite not presently available in qualities, sizes and volumes suitable for use as gemstones. Most of the suppliers of diamonds and other fine gemstones, as well as the suppliers of synthetic gemstones, have substantially greater financial, technical, manufacturing and marketing resources and greater access to distribution channels.

The worldwide market for large, uncut high-quality diamonds is significantly consolidated through the Central Selling Organization, a cartel led by DeBeers. The cartel has a major impact on the worldwide supply and pricing of these diamonds at both the wholesale and retail levels. Although we believe that our jewels appeal primarily to the consumer who would not otherwise purchase comparable diamond jewelry, 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 diamonds. Treated diamonds, which are natural diamonds with imperfections or flaws that have been altered in some manner to enhance their appearance, are presently available in the jewelry industry and are generally less expensive than diamonds of similar size, cut and color, which have not been altered. Synthetic diamond in gemstones or film form may also become available in the marketplace and compete with our jewels. Synthetic diamonds are regularly produced for industrial applications, but we believe that gemstone quality synthetic diamonds presently cannot be produced at prices competitive with those currently offered for our colorless moissanite jewels. The primary producers of these synthetic diamonds are DeBeers, Sumitomo and GE. There are also a number of Russian producers of synthetic diamonds for industrial uses. In addition, development-stage companies, such as the Gemesis Corporation headquartered in Florida, are working to develop cost effective means of producing gem quality synthetic diamonds. Synthetic diamond films can be grown at commercially viable prices in thicknesses that can be applied to other surfaces, but these films adhere



well to only a few minerals such as diamond, silicon and SiC (moissanite). There could, however, be technological advances that would enable competitively priced synthetic diamond in gemstone or film form to be offered.

Although we believe that our products 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, for abrasive uses, and Cree, Siemens AG, ABB and Northrup Grumman Corporation, for semiconductor uses. We believe that Cree is currently the only supplier of SiC crystals in colors, sizes and volumes suitable for gemstone applications, and we believe that the patents owned or pending by Cree or us provide substantial technological, legal and cost barriers to other companies' development of colorless moissanite jewels. It is possible, however, that these or other producers of SiC could develop SiC crystals suitable for gemstone applications and produce moissanite jewels until we could obtain judicial enforcement of our patent rights.

We may also face competition from synthetic cubic zirconia, the principal existing diamond simulant and, to a lesser degree, other synthetic gemstones. The largest producer of synthetic cubic zirconia gemstones is Signity, a new company formed by the merger of Swarogem (a subsidiary of D. Swarovski & Co.) and Golay Buchel. In addition, there are a significant number of other producers of jewelry containing synthetic gemstones. Three of the largest retailers of synthetic cubic zirconia jewelry in the United States are QVC, Home Shopping Network and Wal-Mart. Some of the major retailers of synthetic cubic zirconia, including QVC, have captive manufacturing divisions that produce synthetic cubic zirconia jewelry. These producers and sellers may see their markets being eroded by the introduction of our moissanite jewels. We believe that price is the primary basis upon which these products will compete with our moissanite jewels.

We intend to compete primarily on the basis that the unique qualities of our moissanite jewels are distinct from all other jewels based on their fire, brilliance, luster and durability. In addition, we believe that the Charles & Colvard created moissanite brand, which is being developed pursuant to our strategic global marketing program, will create a long-term competitive advantage for our products. Additionally, we believe that moissanite jewels have a significant cost advantage over other fine gemstones, especially in the one-carat size and larger. Our competitive success depends on the following:

- the willingness and ability of our jewelry distributors and other jewelry suppliers, manufacturers and designers to market and promote moissanite jewels to the retail jewelry trade;

- the willingness of distributors, retailers and others in the channel of distribution to purchase loose moissanite jewels and the willingness of manufacturers, designers and retail jewelers to undertake setting of the loose jewels;

- the ability of manufacturers, designers and retail jewelers to select jewelry settings that encourage consumer acceptance of and demand for our jewels;

- the ability of jewelry manufacturers and retail jewelers to set loose moissanite jewels in jewelry with high quality workmanship; and

- the ability of retail jewelers to effectively market and sell moissanite jewelry to consumers.

Government Regulation

Our products are subject to regulation by the Federal Trade Commission (FTC). 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.

While we intend to comply fully with all FTC regulations, we cannot be sure that the FTC or a



competitor will not challenge our promotional or marketing activities. Such a challenge could result in significant expense and divert the efforts of our management, whether or not such challenge is resolved in our favor. If our actions were found to be in violation of FTC regulations, we could be forced to suspend marketing and sales of our products and could incur significant expenses in developing new marketing strategies and materials that would not violate FTC regulations. We cannot be sure that we would be successful in developing new marketing strategies and materials that would comply with FTC regulations or that such strategies, once developed, would allow us to market our products profitably.

Employees

At March 1, 2002, we had 32 employees. We believe that our future prospects will depend, in part, on our ability to retain our current employees and to obtain additional management, marketing, sales, manufacturing, scientific and technical personnel. Competition for such personnel is substantial, and the number of persons with relevant experience is limited. None of our employees is represented by a labor union. We believe that our employee relations are good.

Business Risks

In addition to the other information in this Form 10-K, you should carefully consider the following important factors that in some cases have affected, and in the future could affect, our actual performance and results and could cause our actual results of operations to differ materially from those expressed in any of our forward-looking statements.

Our business operations could be adversely affected if we do not manage our growth effectively.

Our strategy will require us to achieve rapid growth while curtailing expenditures and motivating our employee base. Periods of rapid growth would place a significant strain on our personnel and other resources, particularly when the Company needs to manage its liquidity and cash expenditures carefully. During 2000, the Company shifted its distribution and advertising strategy to place more emphasis on marketing through jewelry distributors and to control advertising and overhead expenditures. We will continue to be required to manage multiple relationships with various customers and other third parties. If we are unable to manage growth effectively, our business, financial condition and results of operations would be materially adversely affected.

We have a limited operating history which may impact our ability to achieve market acceptance of our products and our ability to produce our products.

We incorporated in June 1995, and we were in the developmental stage through June 30, 1998. We are in the process of commercializing moissanite jewels, building consumer brand awareness and growing distribution channels for our jewels. The timing or existence of any significantly increased revenues is dependent on market acceptance of moissanite jewels and increasing distribution and sales. Our business may also be subject to risks inherent in rapid increases in sales and production levels. Likewise, our products are subject to risks inherent in the development and marketing of new products, including unforeseen design, manufacturing or other problems or failure to develop market acceptance. Failure by us to expand distribution and achieve market acceptance of our products or to develop the ability to produce our products in higher quantities and qualities would have a material adverse effect on our business, operating results and financial condition. Accordingly, our prospects must be considered in light of the risks and difficulties frequently encountered by companies in their early stage of development, particularly technology-based companies, operating in the early stages of manufacturing and distributing unproven products.



Our future financial performance depends upon consumer acceptance of our products which is unproven at this time.

We believe that many retail jewelers and most consumers are not generally aware of the existence and attributes of moissanite jewels. The market for moissanite jewels among retail jewelers and consumers is in the early stages of development as we shipped approximately 62,900 carats during the year ended December 31, 2001. As is the case with any new product, market acceptance and demand are subject to a significant amount of uncertainty. Our future financial performance will depend upon greater consumer acceptance of the Company's moissanite jewels as distinct from all other jewels based on their fire, brilliance, luster, durability and rarity. In addition, consumer acceptance may be impacted by retail jewelers' and jewelry manufacturers' acceptance of moissanite jewels. We market loose jewels which jewelry distributors, manufacturers and retailers set in jewelry and in turn distribute or sell to consumers. The quality, design and workmanship of the jewelry settings selected by retail jewelers, which is not within our control, could impact the consumer's perception and acceptance of our jewels. Thus, our future financial performance may be impacted by:

- the willingness and ability of our jewelry distributors and other jewelry suppliers, manufacturers and designers to market and promote moissanite jewels to the retail jewelry trade;
- the willingness of distributors, retailers and others in the channel of distribution to purchase loose moissanite jewels and the willingness of manufacturers, designers and retail jewelers to undertake setting of the loose jewels;
- the ability of manufacturers, designers and retail jewelers to select jewelry settings that encourage consumer acceptance of and demand for our jewels;
- the ability of jewelry manufacturers and retail jewelers to set loose moissanite jewels in jewelry with high quality workmanship; and
- the ability of retail jewelers to effectively market and sell moissanite jewelry to consumers.

If our products do not receive greater market acceptance, our business, operating results and financial condition would be materially adversely affected.

We are substantially dependent on the distribution of our jewels in North America through Stuller Settings, Inc. and a limited number of other distributors and jewelry manufacturers.

In March 2000, we entered into distribution agreements with two of the largest national wholesale distributors, Stuller Settings, Inc. and Rio Grande, for distribution of moissanite jewels throughout the entire North American market. In 2001, we entered into sales agreements with a limited number of jewelry manufacturers. There is no assurance, however, that our distribution arrangements with Stuller and our sales agreements with manufacturers will sufficiently increase sales in North America. We anticipate that the majority of moissanite jewels sold by us in North America will be distributed through Stuller and our manufacturers, and therefore, we are substantially dependent upon Stuller and our manufacturers for distribution of moissanite jewels in North America.

Historically, the North American market has accounted for a substantial portion of our moissanite jewel sales. In the event that our distribution arrangements with Stuller and Rio Grande fail to maintain and increase the current level of North American sales, our revenues would be materially adversely affected.

We are subject to certain risks due to our international distribution channels and vendors.

Charles & Colvard created moissanite jewels are currently being distributed in substantially all of Western Europe and certain territories in Southeast Asia. We currently have a total of approximately 39



distributors internationally. Our long-term strategy is to expand the number of international markets for our products. In addition, we expect to continue to use certain companies based outside the United States to facet our moissanite jewels. 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 United States. These risks include the following:

- 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; and
- the burdens of complying with a variety of foreign laws and other factors beyond our control.

Additionally, while all 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. We are also subject to general geopolitical risks in connection with our international operations, such as political, social, religious and economic instability, potential hostilities and changes in diplomatic and trade or business relationships.

Further, some of these 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.

We currently depend upon a single source for the supply of SiC crystals.

We currently depend on a single source, Cree Inc. (Cree), for the supply of SiC crystals. Cree has certain proprietary rights relating to its process for growing large single crystals of SiC and its process for growing colorless SiC crystals. Under our Exclusive Supply Agreement with Cree, we are obligated to buy from Cree, and Cree is obligated to sell to us, 50%, by dollar volume, of our requirements for SiC material for the production of gemstones in each calendar quarter. Although we are only required to purchase 50% of our SiC requirements from Cree, we do not currently believe that any other SiC producer could readily supply crystals in the qualities, sizes and volumes needed for our products. Therefore, at the present time, we are wholly dependent on Cree as our sole source for our principal raw material.

While Cree has improved its production processes and is currently producing SiC crystals sufficient to meet the Company's requirements, the Company experienced difficulties in the past in obtaining crystals from Cree in the quality, sizes and volumes that it desired. The Company from time to time enters into purchase agreements with Cree with respect to the specific timing, pricing and other terms of future delivery of SiC crystals and our purchase commitments. There can be no assurance that Cree will be able to continue to produce and supply the Company with raw materials of sufficient quality, sizes and volumes nor that the Company will negotiate purchase commitments that enable it to manage its inventories and raw material costs effectively.

We rely upon our ability to protect our intellectual property.

We have U.S. product and method patents for moissanite jewels under which we have broad, exclusive rights to manufacture, use and sell moissanite jewels in the United States. We have applications pending in a number of foreign jurisdictions for these same patents. We believe that these patents create substantial technological barriers to our potential competitors. We also have other patents and patent applications pending related to certain methods of producing moissanite jewels and related technologies.



There can be no assurance that any other patents will be granted or that any issued patent will have any commercial or competitive value.

At the present time, we are also dependent on Cree's technology for the production of SiC crystals. Cree is exclusively licensed to use a patent concerning a process for growing large single crystals of SiC, has certain patents of its own relating to growth of large single crystals of SiC and has a patent for a process for growing colorless SiC crystals.

There can be no assurance that any patents issued to or licensed by or to us or Cree will provide any significant commercial protection to us or Cree, that we or Cree will have sufficient resources to prosecute our respective patents or that any patents will be upheld by a court should we, Cree or Cree's licensor seek to enforce our respective rights against an infringer. The existence of valid patents does not prevent other companies from independently developing competing technologies. Existing producers of SiC 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 patents owned or licensed by or to us or Cree. In addition, existing producers of SiC, existing producers of other synthetic or natural gemstones or other parties may develop new technologies for producing moissanite jewels in a manner that does not infringe patents owned or licensed by or to us or Cree.

As a result of the foregoing factors, 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, operating results and financial condition.

Our success depends upon our ability to identify, reach agreements with and work successfully with third parties.

In addition to our current dependence on Cree and on third party distribution channels, our prospects depend upon our ability to identify, reach agreements with and work successfully with other third parties. In particular, we rely on third parties to facet our jewels. Faceting moissanite jewels requires different techniques than faceting diamond and other gemstones. There can be no assurance that we can maintain our relationships with our faceting vendors on terms satisfactory to us or that faceting vendors will continue to be able to provide faceting services in the quality and quantities required by us or that we will be able to find suitable replacements if we are unable to maintain such relationships. Our failure to achieve any of the above would have a material adverse effect on our business, operating results 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. In particular, the Federal Trade Commission has the power to restrict the offer and sale of products that could deceive or have the tendency or effect of misleading or deceiving purchasers or prospective purchasers with regard to the type, kind, quality, character, origin or other characteristics of a diamond. 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 jewel products. If our production or marketing of moissanite jewels is challenged by governmental agencies or competitors, or if regulations are issued that restrict our ability to produce and market our products, our business, operating results and financial condition could be materially adversely affected.

Our reputation amongst jewelers and consumers could be damaged if low-quality gemstones or synthetics are marketed as moissanite.

It is possible that low-quality gemstones or other synthetics could be marketed as moissanite. The sale of low-quality products as moissanite could damage our ability to foster the perception of moissanite as a



unique jewel that compares favorably to other fine gemstones like diamond, ruby and emerald. This could damage our reputation among retail jewelers and consumers and result in a loss of consumer confidence in our products. The introduction of low-quality imitation moissanite jewels and our inability to limit the adverse effects thereof could have a material adverse effect on our business, operating results and financial condition.

We do not expect to pay Common Stock dividends.

We have not paid cash dividends in the past and do not expect to pay cash dividends on our common stock for the foreseeable future. In determining whether to pay dividends, our Board of Directors will consider many factors, including our earnings, capital requirements and financial condition.

Some anti-takeover provisions of our charter documents, agreements and plans may delay or prevent a takeover of our Company.

A number of provisions of our articles of incorporation and bylaws deal with matters of corporate governance and the rights of shareholders. Certain of these provisions may be deemed to have an anti-takeover effect and may delay or prevent takeover attempts not first approved by the 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 all of our shareholders.

Under the terms of the Exclusive Supply Agreement, we are prohibited from entering into an exclusive marketing or distribution agreement with DeBeers or its affiliates or the Central Selling Organization (the international cartel of diamond producers) or any party whose primary business is the development, manufacture, marketing or sale of diamond gemstones or any non-gemstone and non-jewelry industry competitor of Cree. The agreement also prohibits us from entering into certain merger, acquisition, sale of assets or similar transactions with a prohibited party. These provisions of the Exclusive Supply Agreement could limit the price that third parties might be willing to pay in the future for some or all of the shares of our common stock. In addition, this agreement could prevent us from entering into certain potentially profitable transactions with such prohibited parties.

On February 21, 1999, we adopted a Shareholder Rights Plan under which all shareholders of record as of March 8, 1999, received rights to purchase shares of a new series of Preferred Stock. Each share of common stock issued after March 8, 1999 has received the same rights.

The Rights Plan is designed to enable all of our shareholders to realize the full value of their investment and to provide for fair and equal treatment for all shareholders in the event that an unsolicited attempt is made to acquire us. The adoption of the Rights Plan is intended as a means to guard against abusive takeover tactics and is not in response to any particular proposal. The Rights, which expire in 2009, will be exercisable only if a person or group acquires 20% or more of our common stock or announces a tender offer for 20% or more of the common stock. If a person or group acquires 20% or more of our common stock, all shareholders except the purchaser will be entitled to acquire our common stock at a 50% discount. The effect will be to discourage acquisitions of more than 20% of our common stock without negotiations with the Board.

The Rights will trade with our common stock, unless and until they are separated upon the occurrence of certain future events. Our Board of Directors may redeem the Rights prior to the expiration of a specified period following the acquisition of more than 20% of our common stock.



ITEM 2. PROPERTIES

We lease approximately 12,700 square feet of mixed-use space (general office, light manufacturing and laboratory) in the Research Triangle Park area of North Carolina from an unaffiliated third party. This space houses our executive offices, sales offices and research and development facilities. We believe that comparable mixed-use space could be obtained from other parties on terms substantially the same as the current lease. Our management considers this space to be sufficient for our foreseeable needs over the next 12 months.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any material legal proceedings.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

Not Applicable.

Part II

ITEM 5. MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Our common stock is traded on the NASDAQ National 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 National Market. As of March 1, 2002, there were 231 shareholders of record of the common stock.

| | 2001 | | 2000 | |
|---|---|---|---|---|
| | High | Low | High | Lo |
| First Quarter | $ 1.68 | $ 0.81 | $ 8.63 | $ 6. |
| Second Quarter | 2.05 | 0.83 | 7.88 | 5. |
| Third Quarter | 1.55 | 0.81 | 7.63 | 3. |
| Fourth Quarter | 1.22 | 0.80 | 4.13 | 1. |

We have never paid dividends on our capital stock. We intend to retain earnings, if any, for use in our business and do not anticipate paying any cash dividends in the foreseeable future.



ITEM 6. SELECTED FINANCIAL DATA

The following selected statement of operations data for the years ended December 31, 2001, 2000 and 1999, and the selected balance sheet data at December 31, 2001 and 2000 have been derived from, and are qualified by reference to, our financial statements included elsewhere in this report which have been audited by Deloitte & Touche LLP, independent auditors. The selected statement of operations data for the years ended December 31, 1998 and 1997 and the selected balance sheet data at December 31, 1999, 1998 and 1997 have been derived from audited financial statements not included herein. The selected financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Financial Statements and Notes thereto included elsewhere in this report.

CHARLES & COLVARD, LTD. (FORMERLY C3, INC.)

| | Year Ended Decembe | | |
|---|---|---|---|
| | 2001 | 2000 | 1999 |
| Statements of Operations Data | | | |
| Net sales | $11,505,129 | $ 12,795,125 | $ 12,272,907 |
| Cost of goods sold | 5,137,630 | 5,828,319 | 6,405,887 |
| Gross profit | 6,367,499 | 6,966,806 | 5,867,020 |

| | | | |
|---|---|---|---|
| Operating expenses: | | | |
| Marketing and sales | 3,222,743 | 9,348,272 | 6,410,042 |
| General and administrative (1) | 2,104,180 | 3,372,083 | 3,039,595 |
| Research and development | 21,977 | 1,439,526 | 2,710,692 |
| Other | 119,460 | 313,538 | -- |
| Total operating expenses | 5,468,360 | 14,473,419 | 12,160,329 |
| Operating income (loss) | 899,139 | (7,506,613) | (6,293,309) |
| Interest income, net | 325,596 | 428,081 | 1,141,626 |
| Net income (loss) | $ 1,224,735 | $ (7,078,532) | $ (5,151,683) |
| Basic and diluted net income (loss) per share: | $ 0.10 | $ (0.99) | $ (0.73) |
| Weighted-average common shares: (2) | | | |
| Basic | 12,546,108 | 7,167,088 | 7,040,891 |
| Diluted | 12,555,630 | 7,167,088 | 7,040,891 |

| | Year Ended Decembe | | |
|---|---|---|---|
| | 2001 | 2000 | 1999 |
| Balance Sheet Data | | | |
| Cash and equivalents | $10,236,319 | $ 3,826,402 | $13,161,665 |
| Working capital | 33,444,926 | 25,937,806 | 26,709,142 |
| Total assets | 35,241,930 | 29,607,994 | 36,780,902 |
| Shareholders' equity | 34,077,776 | 26,859,784 | 33,494,143 |

1. Compensation expense related to the issuance of stock options for 2001, 2000, 1999, 1998 and 1997 was $37,262, $149,368, $282,572, $527,811, and $1,632,804 respectively. See Note 7 of Notes to Financial Statements. In addition, for the year ended December 31, 1997, general and administrative expense includes $66,000 of compensation expense related to the January 2, 1997 issuance of common stock to Cree pursuant to a stock option.

2. The calculation of shares for all periods reflects a 2.13-for-1 common stock split effected in September 1997. The calculation also gives effect to the automatic conversion of the Series A Preferred Stock and Series B Preferred Stock into 2.13 shares of common stock for each share of Preferred Stock effective upon completion of the Company's initial public offering.



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

OF OPERATION

All statements, trend analysis and other information contained in the following discussion relative to markets for our products and trends in revenue, gross margins and anticipated expenses levels, as well as other statements, including words such as "anticipate," "believe," "plan," "estimate," "expect" and "intend" and other similar expressions constitute forward-looking statements. Our business is subject to business and economic risks and uncertainties, and our actual results of operations may differ materially from those expressed or implied in the forward-looking statements. The following discussion and the Section entitled "Business Risks" describes some, but not all, of the factors that could cause these differences.

Overview

We manufacture, market and distribute Charles & Colvard created moissanite jewels (also called moissanite or moissanite jewels) for sale in the worldwide jewelry market. Moissanite, also known by its chemical name, silicon carbide (SiC), is a rare, naturally occurring mineral found primarily in meteorites. As the sole manufacturer of scientifically-made moissanite jewels, our strategy is to create a unique brand image which positions moissanite as a jewel in its own right, distinct from all other jewels based on its fire, brilliance, luster, durability and rarity.

From our inception in June 1995 through June 30, 1998, we were a development stage enterprise, devoting our resources to fund research and development of colorless, scientifically made moissanite jewels. We began shipping moissanite to domestic retail jewelers and international distributors during the second quarter of 1998. At that time, we launched limited consumer-focused advertising and promotion activities. During the second quarter of 2000, we changed our domestic distribution model to sell through jewel distributors and jewelry manufacturers rather than direct to retail stores.

In March 2000, we entered into distribution agreements with Stuller Settings, Inc. (Stuller) and Rio Grande, two of the largest suppliers of jewelry-related products to the jewelry industry, for the North American distribution of moissanite. We have also entered into several agreements with domestic jewelry manufacturers. Through these agreements with Stuller, Rio Grande and jewelry manufacturers and the brand awareness created by our marketing program, we sought to rapidly increase the introduction of moissanite into the domestic jewelry market while maintaining average selling prices. Although these new distribution and marketing strategies enabled us to achieve profitability and positive cash flow in 2001, these strategic efforts are still in an early stage, and we have no assurance that they will be successful in the long-term.

In October 2000, we established a wholly-owned subsidiary in Hong Kong, Charles & Colvard HK Ltd., for the purpose of gaining better access to the important Far Eastern markets. The importance of having a presence in this market is twofold; Hong Kong is the headquarters city for a very large number of jewelry manufacturing companies with sales and distribution worldwide, and Hong Kong is the gateway to the markets of Mainland China. We do not anticipate establishing additional subsidiaries in the near future.

In 2001, we dramatically cut marketing and sales expenses, primarily by discontinuing significant advertising and promotion expenses in favor of lower cost public relations and media editorial initiatives. Additionally, general and administrative costs were lowered through personnel reductions, and significant savings were realized by suspending all research and development efforts with Cree. Domestic sales accounted for 82% of total sales in 2001 as we concentrated on growing our domestic business. Domestic distribution of moissanite expanded in 2001 into additional retail stores, including our first retail jewelry chain. Catalog sales of moissanite jewelry expanded significantly. We demonstrated that with appropriate product mix and product positioning, home shopping channels were a viable distribution channel for jewelry featuring moissanite. Primarily as a result of these efforts, we became profitable and generated positive cash flow from operations in 2001.

Our strategy for 2002 is to build upon our successes of 2001. We will continue to expend the majority of our resources on the domestic market. However, we will invest resources in certain international markets that show the most potential. We believe that our sales can increase as the distribution of moissanite jewels expands domestically and internationally. Management believes that our current infrastructure can support a significant growth in sales. Although our 2002 goals are to increase sales, achieve rapid growth and remain profitable, we cannot be sure that we will achieve or sustain sales increases or sustain profitability.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. The most significant estimates impacting our consolidated financial statements relate to costing and classification of inventories and revenue recognition.

Inventories are stated at the lower of cost or market determined on a first in, first out basis. Our inventories consist primarily of colorless moissanite jewels that meet rigorous grading criteria and are of cuts and sizes most commonly used in the jewelry industry. Moissanite jewels that do not meet our grading criteria and therefore are not deemed to be saleable are not included in inventories. We carry only a limited amount of moissanite jewels in finished jewelry settings. As a result, our inventories do not degrade over time and are not subject to fashion trends. Our distribution channels include two of the largest suppliers of jewelry-related products to the jewelry industry, jewelry manufacturing, a home shopping channel and catalogs. Consequently, significant amounts of inventories must be maintained at all times. Given our current assumptions, we believe that a substantial amount of inventories will be sold or consumed during our operating cycle. However, no assurances can be given that this reduction will occur.

Revenue is generally recognized when products are shipped. From time to time, we ship certain items on "memo" terms. For goods shipped on memo terms, the customer receives title to the goods and assumes the risk of loss; however, the customer has an absolute right of return during the specified memo period. We recognize revenue on these transactions upon the earlier of 1) the customer informing us that they will keep the product or 2) the expiration of the memo period.

Results of Operations

Year ended December 31, 2001 compared with Year ended December 31, 2000.

Net sales were $11,505,129 for the year ended December 31, 2001 compared to $12,795,125 for the year ended December 31, 2000, a decrease of $1,289,996 or 10.1%. Shipments of moissanite jewels decreased in 2001 to approximately 63,000 carats from approximately 69,000 carats in 2000. Domestic carat shipments increased by 14%, offset by a 52% decrease of international carat shipments. Average selling price per carat decreased by 2% in 2001 when compared to 2000 due primarily to increased sales of smaller jewels which have a lower price per carat. We focused our sales and marketing efforts during 2001 on the domestic market. During 2001, the domestic distribution of moissanite expanded into additional retail stores (including our first retail chain), catalog sales, and home shopping channels. The



decreased international sales can be partially attributed to the lack of significant advertising and public relations activities abroad. Our plan for 2002 is to maintain our focus on the domestic market, while investing resources in certain international markets that show the most potential.

Our gross profit margin was 55.3% for the year ended December 31, 2001 compared to 54.4% for the year ended December 31, 2000. The increased gross margin percentage is primarily due to improved yield of moissanite jewels from SiC crystals and a $135,000 decrease in our reserve for excess inventory, partially offset by a 2% decrease in our average selling prices. Although the gross margin percentage stayed relatively constant in 2001 compared to 2000, the future gross margin percentages will fluctuate dependent upon the mix of products sold. On average, the gross margin percentage on smaller stones is less than larger stones.

Marketing and sales expenses were $3,222,743 for the year ended December 31, 2001 compared to $9,348,272 for the year ended December 31, 2000, a decrease of $6,125,529 or 65.5%. The decrease resulted primarily from a $5 million reduction in advertising and promotion costs consistent with our strategy to increase consumer impressions through lower cost approaches such as public relations activities and media editorial coverage, as well as decreased sales compensation costs (including severance costs recorded in 2000).

General and administrative expenses were $2,104,180 for the year ended December 31, 2001 compared to $3,372,083 for the year ended December 31, 2000, a decrease of $1,267,903 or 37.6%. The decrease was primarily a result of $425,000 of decreased compensation costs (including severance costs of $245,000 recorded in 2000), a $340,000 decrease in bad debt expense, and reduced general overhead expenses consistent with our efforts to cut costs.

Research and development expenses were $21,977 for the year ended December 31, 2001 compared to $1,439,526 for the year ended December 31, 2000, a decrease of $1,417,549 or 98.5%. The decrease resulted from the suspension of development efforts with Cree effective January 1, 2001. This should not impact the future quality of SiC crystals from Cree.

Other expenses for the year ended December 31, 2001 amounted to $119,460, resulting from the write-off of certain patent costs and a loss on the disposition of certain other assets. Other expenses for the year ended December 31, 2000 amounted to $313,538, which resulted primarily from the loss on the sale of crystal growth equipment to Cree and the disposition of certain other assets.

Net interest income was $325,596 for the year ended December 31, 2001 compared to $428,081 for the year ended December 31, 2000, a decrease of $102,485 or 23.9%. This decrease resulted from a lower interest rate earned on our cash balances, as well as approximately $61,000 of interest earned during 2000 on a receivable from Cree that was completely paid in 2000.

Year ended December 31, 2000 compared with Year ended December 31, 1999.

Net sales were $12,795,125 for the year ended December 31, 2000 compared to $12,272,907 for the year ended December 31, 1999, an increase of $522,218 or 4.3%. Net sales of moissanite jewels and jewelry increased to approximately $12,630,000 in 2000 from approximately $11,680,000 in 1999. Shipments of moissanite jewels increased in 2000 to approximately 69,000 carats from approximately 55,000 carats in 1999. Increased shipments of moissanite jewels were offset by a reduction in the average selling price of moissanite jewels as we experienced the effects of the volume purchase discounts offered to our new domestic distribution and manufacturing partners. We changed our domestic business model effective the second quarter of 2000 to sell jewels through jewel distributors and jewelry manufacturers rather than direct to retail stores.



Our gross profit margin was 54.4% for the year ended December 31, 2000 compared to 47.8% for the year ended December 31, 1999. The increased gross margin rate relates to significantly improved yield of moissanite jewels from SiC crystals, which was partially offset by a reduction in the per carat average selling price of moissanite jewels in 2000.

Marketing and sales expenses were $9,348,272 for the year ended December 31, 2000 compared to $6,410,042 for the year ended December 31, 1999, an increase of $2,938,230 or 45.8%. The increase resulted primarily from the media placement costs associated with our strategic global marketing program launched in the fourth quarter of 1999 and co-op advertising programs with our customers. We expensed approximately $4,100,000 of media costs in 2000 related to the strategic global marketing program, which was designed to increase consumer awareness and included advertising on national cable television, national magazines, network television and movie theaters in certain targeted markets.

General and administrative expenses were $3,372,083 for the year ended December 31, 2000 compared to $3,039,595 for the year ended December 31, 1999, an increase of $332,488 or 10.9%. The increase resulted primarily from an increase in our allowance for uncollectible accounts and increased rent on our expanded facility.

Research and development expenses were $1,439,526 for the year ended December 31, 2000 compared to $2,710,692 for the year ended December 31, 1999, a decrease of $1,271,166 or 46.9%. The decrease resulted primarily from cost savings related to the reduction of development efforts by Cree effective September 1, 1999, from a funding level of $240,000 per month to $120,000 per month.

Other expenses for the year ended December 31, 2000 amounted to $313,538 which resulted primarily from the loss on the sale of crystal growth equipment to Cree and the disposition of certain other assets.

Net interest income was $428,081 for the year ended December 31, 2000 compared to $1,141,626 for the year ended December 31, 1999, a decrease of $713,545 or 62.5%. This decrease resulted from lower interest earned on our lower cash balances.

Liquidity and Capital Resources

At December 31, 2002, we had $10.2 million of cash and cash equivalents and $33.4 million of working capital. Cash and inventory account for over 90% of our current assets. Our principal sources of liquidity are cash on hand and cash generated by operations. During the twelve months ended December 31, 2001, $435,189 was generated by operations. The major components of the generated cash were net income of $1,224,735 and a reduction in inventory of $1,730,345, offset by a $1,285,010 increase in receivables and $1,435,295 reduction in payables. In addition, we completed a Rights Offering to our shareholders on February 21, 2001, raising approximately $6 million of net proceeds. We believe our existing capital resources are adequate to satisfy our capital requirements for at least the next 12 months.

In January 2002, we agreed with Cree on a framework for purchases of SiC crystals during 2002. We will be obligated to purchase a minimum quantity of usable material on a quarterly basis if Cree meets certain minimum quality levels. Dependent upon the quality of material received, purchases from Cree during 2002 are expected to be between $900,000 and $3.7 million.

The 4-year Development Agreement with Cree, as amended, requires us to fund a development program at Cree for $1.44 million annually through December 31, 2002. Either party may terminate the agreement if Cree does not meet the annual performance milestone or if the parties do not mutually agree on the performance milestones for the ensuing year. Our funding obligations under the Development Agreement were suspended from January 2001 through December 31, 2002, and will be terminated upon our meeting certain purchasing levels in 2002.



On September 18, 2001, we announced that our Board of Directors authorized the repurchase of up to 1,300,000 shares of our common stock. At the discretion of management, the repurchase program can be implemented through open market or privately negotiated transaction at prevailing prices. We will determine the time and extent of repurchases based on our evaluation of market conditions and other factors. During the twelve months ended December 31, 2002, we repurchased from a Director 76,000 shares at a cost of $1 per share.

Net Operating Loss Carryforward

As of December 31, 2001, we had a net operating loss (NOL) carryforward of approximately $19.1 million, which expires between 2010 and 2016. In accordance with Section 382 of the Internal Revenue Code of 1986, as amended, a change in equity ownership of greater than 50% within a three-year period will result in an annual limitation on our ability to utilize our NOL carryforwards that were created during tax periods prior to the change in ownership. As a result of various equity offerings and certain shareholder transactions, the utilization of a portion of our NOL carryforwards has become limited, but we do not believe this limitation will have a material effect on our ability to utilize the NOL carryforward.

Newly Adopted Accounting Pronouncements

In June 1998, Statement of Financial Accounting Standards No. 133 ("FAS 133"), Accounting for Derivative Instruments and Hedging Activities, was issued. This statement establishes standards for valuing and reporting at fair value all derivative instruments as either assets or liabilities. FAS 133, as amended by FAS 137 and 138, was effective January 1, 2001. The adoption of FAS 133 did not have a material effect on our consolidated financial statements.

In July 2001, FAS No. 141, Business Combinations, was issued. This statement prospectively prohibits the pooling-of-interest method of accounting for business combinations initiated after June 30, 2001. The adoption of FAS 141 did not have a material effect on our consolidated financial statements.

Newly Issued Accounting Pronouncements

In July 2001, FAS No. 142, Goodwill and Other Intangible Assets, was issued.

This statement requires that goodwill and other intangible assets with indefinite useful lives no longer be amortized, but instead tested for impairment at least annually. This statement is effective on January 1, 2002. We do not have goodwill or other intangible assets with indefinite useful lives, and believe the adoption of this statement will not have an effect on our consolidated financial statements.

In August 2001, FAS No. 143, Accounting For Asset Retirement Obligations, was issued. This statement requires recording the fair value of a liability for an asset retirement obligation in the period in which it is incurred, and a corresponding increase in the carrying value of the related long-lived asset. Over time, the liability is accreted to its present value each period, and the capitalized cost is depreciated over the useful life of the related asset. Upon settlement of the liability, it is either settled for its recorded amount or a gain or loss upon settlement is recorded. FAS 143 is effective for our fiscal year ended December 31, 2003. We do not have any asset retirement obligations and do not expect the adoption of this statement to have an effect on our consolidated financial statements.

In August 2001, FAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, was issued. This statement addresses financial accounting and reporting for the impairment or disposal of long-lived assets. FAS 144 is effective for our fiscal year ended December 31, 2003. We are currently assessing, and have not yet determined the impact of FAS 144 on our financial position and results of operations.



ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We believe that our exposure to market risk for changes in interest rates is not significant because our investments are limited to highly liquid instruments with maturities of three months or less. At December 31, 2001, we had approximately $9.7 million of short-term investments classified as cash and equivalents. All of our transactions with international customers and suppliers are denominated in U.S. dollars. This limits our currency fluctuation risk, however, the recent strong value of the dollar against our customers' local currency could limit the amount of their purchases.



Item 8. Financial Statements and Supplementary Data

Index to Financial Statements

Consolidated Statements of Cash Flows for the years ended December 31, 2001, 2000 and 1999

Notes to Consolidated Financial Statements

Financial Statement Schedule
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Schedule II - Valuation and Qualifying Accounts

All other schedules are omitted due to the absence of the conditions under which they are required or because the required information is included within the financial statements or the notes thereto included in Item 8.

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INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying consolidated balance sheets of Charles & Colvard, Ltd. and subsidiary (the "Company") as of December 31, 2001 and 2000, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2001. Our audits also included the financial statement schedule listed in the Index at Item 8. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2001 and 2000, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

DELOITTE & TOUCHE LLP

Raleigh, North Carolina
February 25, 2002



CHARLES & COLVARD, LTD.
CONSOLIDATED STATEMENTS OF OPERATIONS

| | Year End | |
|---|---|---|
| | 2001 | |
| Net sales | $11,505,129 | $ 12 |
| Cost of goods sold | 5,137,630 | 5 |
| Gross profit | 6,367,499 | 6 |
| Operating expenses: | | |
| Marketing and sales | 3,222,743 | 9 |
| General and administrative (Note 7) | 2,104,180 | 3 |
| Research and development | 21,977 | 1 |
| Other expenses | 119,460 | |
| Total operating expenses | 5,468,360 | 14 |
| Operating income (loss) | 899,139 | (7 |
| Interest income, net | 325,596 | |
| Net income (loss) | $ 1,224,735 | $ (7 |
| Basic and diluted net income (loss) per share: (Note 2) | $ 0.10 | $ |
| Weighted-average common shares: | | |
| Basic (Note 2) | 12,546,108 | 7 |
| Diluted (Note 2) | 12,555,630 | 7 |

See notes to consolidated financial statements.



CHARLES & COLVARD, LTD.
CONSOLIDATED BALANCE SHEETS

| | December 3 | |
|---|---|---|
| | 2001 | |
| **Assets** | | |
| Current Assets: | | |
| Cash and equivalents | $ 10,236,319 | $ |
| Accounts receivable, net of allowance for doubtful accounts of $275,000 and $320,000 respectively | 2,803,117 | |
| Interest receivable | 13,824 | |
| Inventory, net (Note 3) | 21,341,071 | |
| Prepaid expenses and other assets | 214,749 | |
| Total current assets | 34,609,080 | |
| Equipment, net (Note 4) | 342,281 | |
| Patent and license rights, net (Note 4) | 290,569 | |
| Total assets | $ 35,241,930 | $ |
| **Liabilities and Shareholders' Equity** | | |
| Current Liabilities: | | |
| Accounts payable: | | |
| Cree, Inc. (Note 9) | $ 405,020 | $ |
| Other | 154,831 | |
| Accrued payroll | 202,012 | |
| Accrued expenses and other liabilities | 272,490 | |
| Deferred revenue | 129,801 | |
| Total current liabilities | 1,164,154 | |
| Commitments (Note 9) | | |
| Shareholders' Equity (Notes 5 and 6) | | |
| Common stock, no par value; 50 million shares authorized; 13,371,714 and 7,200,979 shares issued and outstanding at December 31, 2001 and 2000, respectively | 55,182,692 | |
| Additional paid-in capital--stock options | 1,964,006 | |
| Accumulated deficit | (23,068,922) | |
| Total shareholders' equity | 34,077,776 | |
| Total liabilities and shareholders' equity | $ 35,241,930 | |

See notes to consolidated financial statements.

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

| | Common Stock | | Additional Paid-in Capital - Stock Options |
|---|---|---|---|
| | Number Of Shares | Amount | |
| Balance at January 1, 1999 | 6,993,309 | $48,149,406 | $ 1,910,368 |
| Compensation expense related to stock options | -- | -- | 282,572 |
| Stock options exercised | 105,602 | 608,296 | (241,374) |
| Net loss | -- | -- | -- |
| Balance at December 31, 1999 | 7,098,911 | 48,757,702 | 1,951,566 |
| Compensation expense related to stock options | -- | -- | 149,368 |
| Stock options exercised | 102,068 | 468,995 | (174,190) |
| Net loss | -- | -- | -- |
| Balance at December 31, 2000 | 7,200,979 | 49,226,697 | 1,926,744 |
| Compensation expense related to stock options | -- | -- | 37,262 |
| Proceeds from rights offering, net of offering costs of $214,740 | 6,246,735 | 6,031,995 | -- |
| Shares repurchased | (76,000) | (76,000) | -- |
| Net income | -- | -- | -- |
| Balance at December 31, 2001 | 13,371,714 | $55,182,692 | $ 1,964,006 |

See notes to consolidated financial statements.

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CHARLES & COLVARD, LTD.
CONSOLIDATED STATEMENTS OF CASH FLOWS

| | Year Ended December 31 | | |
|---|---|---|---|
| | 2001 | 2000 | 1999 |
| Operating Activities | | | |
| Net income (loss) | $ 1,224,735 | $ (7,078,532) | $ (5,151, |
| Adjustments: | | | |
| Depreciation and amortization | 150,935 | 569,986 | 741, |
| Stock option compensation | 37,262 | 149,368 | 282, |
| Loss on disposal of long term assets | 119,460 | 336,958 | 69, |
| Change in provision for uncollectable accounts | (45,000) | 250,000 | |
| Changes in assets and liabilities: | | | |
| Accounts receivable | (1,290,076) | (386,513) | (784, |
| Interest receivable | 5,066 | 56,109 | 46, |

| | | | |
|---|---|---|---|
| Inventory | 1,730,345 | (3,303,528) | (11,675, |
| Prepaid expenses and other assets | 86,518 | 358,554 | (365, |
| Accounts payable | (1,435,295) | (937,776) | 1,003, |
| Accrued payroll | 91,386 | (49,021) | 24, |
| Accrued expenses and other liabilities | (256,952) | 453,982 | (12, |
| Deferred revenue | 16,805 | (5,734) | 99, |
| Net cash provided (used) in operating activities | 435,189 | (9,586,147) | (15,721, |
| Investing Activities | | | |
| Purchases of equipment | (37,362) | (23,771) | (3,159, |
| Patent and license rights costs | (15,305) | (62,600) | (327, |
| Proceeds from sale of long term assets | 71,400 | 42,450 | |
| Net cash provided (used) in investing activities | 18,733 | (43,921) | (3,487, |
| Financing Activities | | | |
| Stock options exercised | -- | 294,805 | 366, |
| Purchase of common stock | (76,000) | -- | |
| Proceeds from stock rights offering | 6,031,995 | -- | |
| Net cash provided by financing activities | 5,955,995 | 294,805 | 366, |
| Net change in cash and equivalents | 6,409,917 | (9,335,263) | (18,842, |
| Cash and equivalents at beginning of year | 3,826,402 | 13,161,665 | 32,004, |
| Cash and equivalents at end of year | $ 10,236,319 | $ 3,826,402 | $ 13,161, |

Supplemental non-cash investing activity:
In May 2000, the Company sold its crystal growth equipment to Cree, Inc. (Cree) for $5,000,000. The $5 million receivable from this transaction was reduced by future purchases from Cree.

Supplemental non-cash operating activity:
During the twelve months ended December 31, 2000, there were approximately $5,000,000 of inventory purchases financed by the receivable from Cree.

See notes to consolidated financial statements.

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CHARLES & COLVARD, LTD.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--
YEARS ENDED DECEMBER 31, 2001, 2000, AND 1999

1. Organization and Basis of Presentation

Charles & Colvard, Ltd. (formerly C3, Inc.) ("the Company"), was incorporated in North Carolina on June 28, 1995, and manufactures, markets and distributes Charles & Colvard created moissanite jewels (hereinafter referred to as moissanite or moissanite jewels) for sale in the worldwide jewelry market. Moissanite, also known by its chemical name, silicon carbide (SiC), is a rare, naturally occurring mineral found primarily in meteorites. Moissanite is being positioned as a jewel in its own right, distinct from all other jewels based on its fire, brilliance, luster, durability and rarity and it is being marketed to women ages 30-65 with an annual household income in excess of $60,000. From its inception in June 1995 through June 30, 1998, the Company was a development stage enterprise that devoted its resources to fund research and development of colorless, scientifically made moissanite jewels. The Company began shipping moissanite to domestic retail jewelers and international distributors during the second quarter of 1998. At that time it launched limited consumer-focused advertising and promotion activities. During the second quarter of 2000, the Company changed its domestic distribution model to sell through jewel distributors and jewelry manufacturers rather than direct to retail stores.

All the Company's activities are within a single business segment. Export sales aggregated approximately $2.1 million, $4.6 million, and $6.7 million in 2001, 2000, and 1999 respectively.

2. Summary of Significant Accounting Policies

Principles of Consolidation
The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiary in Hong Kong. This subsidiary was established in October of 2000. All inter-company accounts have been eliminated.

Cash and Equivalents
The Company considers all money market accounts and investments purchased with an original maturity of three months or less to be cash equivalents.

Inventory
Inventories are stated at lower of cost or market determined on a first in, first out basis. Based on current estimates and assumptions, the Company believes that a substantial amount of inventories will be sold or consumed during its operating cycle. However, to be prepared to react to possible customer demand for large purchases and for a variety of jewel styles, a significant amount of inventory must be maintained at all times.

Equipment
Equipment is recorded at cost and depreciated on the straight-line method based on estimated useful lives of three to 12 years. Leasehold improvements are amortized on the straight-line method over the life of the related lease.

Patents and License Rights
The Company capitalizes costs associated with obtaining patents issued or pending for inventions and license rights related to the manufacture of moissanite jewels and moissanite jewel test instruments. Such costs are amortized over 17 years.

Accounting for Long-Lived Assets
The Company accounts for long-lived assets in accordance with Statement of Financial Accounting Standards ("FAS") No. 121, Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of. The Company evaluates the recoverability of its long-lived assets for financial



impairment whenever events or changes in circumstances indicate that the carrying value of such assets may not be fully recoverable. Based on these evaluations, there were no significant adjustments to the carrying value of long-lived assets in 2001 or 2000.

Concentrations of Credit Risk
Financial instruments which potentially subject the Company to concentrations of credit risk are primarily cash equivalents and trade receivables. The Company maintains cash and cash equivalents with high quality financial institutions and invests in low risk securities including U.S. Treasury bills, money market

funds, and government agency notes.

Trade receivables potentially subject the Company to credit risk. The Company extends credit to its customers based upon an evaluation of the customer's financial condition and credit history and does not require collateral. During 2001, two major customers accounted for approximately 38% and 26% of the Company's sales. At December 31, 2001, these customers accounted for 38% and 22% of receivables, respectively. A third customer accounted for 19% of receivables at December 31, 2001. During 2000, one customer accounted for 26% of the Company's sales and 47% of the receivables at December 31, 2000. During 1999, one customer accounted for 12% of the Company's revenue and no customer accounted for 10% or more of total accounts receivable at December 31, 1999.

Revenue Recognition

Revenue is generally recognized when products are shipped. From time to time, the Company ships certain items on "memo" terms. For goods shipped on memo terms, the customer receives title to the goods and assumes the risk of loss, however they have an absolute right of return during the specified memo period. The Company recognizes revenue on these transactions upon the earlier of 1) the customer informing the Company that it will keep the product or 2) the expiration of the memo period.

Advertising Costs

Advertising production costs are expensed as incurred. Media placement costs are expensed over the period the advertising appears. Advertising expenses for the years ended December 31, 2001, 2000, and 1999 amounted to approximately $1,600,000, $5,710,000, and $2,920,000, respectively.

Research and Development

All research and development costs are expensed as incurred.

Stock Compensation

The Company's stock option plans are accounted for in accordance with Accounting Principles Board Opinion No. 25 ("APB 25"), Accounting for Stock Issued to Employees. The Company follows the disclosure requirements of FAS No. 123, Accounting for Stock Based Compensation.

Use of Estimates

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

Income Taxes

The Company accounts for income taxes under the provisions of FAS No. 109, Accounting for Income Taxes. Under FAS 109, deferred income taxes are recognized for the tax consequences of "temporary" differences by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities. Valuation allowances are established when necessary to reduce deferred tax assets to the amount that is likely to be realized. As of December 31, 2001 and 2000, the net deferred tax assets have been fully reserved.



Net Income (Loss) Per Share

The Company reports its net income (loss) per share in accordance with the Statement of FAS No. 128, Earnings Per Share. FAS 128 requires the presentation of both basic and diluted earnings per share, regardless of materiality, unless per share amounts are equal. Basic net income (loss) per share computations are based on the weighted-average common shares outstanding. Diluted net income (loss) per share computations include the dilutive effect, if any, of stock options and warrants using the treasury stock method.

For the years ended December 31, 2001, 2000, and 1999, warrants to purchase 300,000 shares of common stock at $18 per share were excluded from the computation of diluted net income (loss) per share because either the exercise price 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 income (loss) per share. In addition, for the years ended December 31, 2001, 2000, and 1999 stock options to purchase approximately 1.2 million shares were also excluded from the computation of diluted net income (loss) per share because either the options' exercise price 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 income (loss) per share. During 2001, approximately 180,000 common stock options with an exercise price less than the average market price were included in the computation of diluted earnings per share. The weighted-average dilutive impact of these options, net of 170,000 treasury shares assumed to be repurchased, was 9,522 shares.

Newly Adopted Accounting Pronouncements
In June 1998, FAS No. 133, Accounting for Derivative Instruments and Hedging Activities, was issued. This statement establishes standards for valuing and reporting at fair value all derivative instruments as either assets or liabilities. FAS 133, as amended by FAS 137 and 138, was effective January 1, 2001. The adoption of FAS 133 did not have a material effect on the Company's consolidated financial statements.

In July 2001, FAS No. 141, Business Combinations, was issued. This statement prospectively prohibits the pooling-of-interest method of accounting for business combinations initiated after June 30, 2001. The adoption of FAS 141 did not have a material effect on the Company's consolidated financial statements.

Newly Issued Accounting Pronouncements
In July 2001, FAS No. 142, Goodwill and Other Intangible Assets, was issued. This statement requires that goodwill and other intangible assets with indefinite useful lives no longer be amortized, but instead tested for impairment at least annually. This statement is effective for the Company on January 1, 2002. The Company does not have goodwill or other intangible assets with indefinite useful lives and management believes the adoption of this statement will not have an effect on its consolidated financial statements.

In August 2001, FAS No. 143, Accounting For Asset Retirement Obligations, was issued. This statement requires recording the fair value of a liability for an asset retirement obligation in the period in which it is incurred, and a corresponding increase in the carrying value of the related long-lived asset. Over time, the liability is accreted to its present value each period, and the capitalized cost is depreciated over the useful life of the related asset. Upon settlement of the liability, it is either settled for its recorded amount or a gain or loss upon settlement is recorded. FAS 143 is effective for the Company's fiscal year ended December 31, 2003. The Company does not have any asset retirement obligations and does not expect the adoption of FAS 143 to have an effect on our consolidated financial statements.

In August 2001, FAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets was issued. This statement addresses financial accounting and reporting for the impairment of disposal of long-lived assets. FAS 144 is effective for the Company's fiscal year ended December 31, 2003. The Company is currently assessing, but has not yet determined the impact of FAS 144 on its financial position and results of operations.

Reclassification

Certain 2000 and 1999 amounts have been reclassified to conform with the 2001 presentation.

3. Inventories

Inventories consisted of the following:

| | December 31 |
|---|---|
| | 2001 |
| Moissanite | |
| Raw materials | $ 131,525 |
| Work-in-process | 1,604,699 |
| Finished goods | 19,588,295 |
| | 21,324,519 |
| Test instruments | 16,552 |
| Total Inventory | $ 21,341,071 |

Finished goods are shown net of a reserve for excess jewelry inventory of $170,000 and $270,000 at December 31, 2001 and December 31, 2000, respectively. Test instruments are shown net of a reserve for excess inventory of $465,000 and $500,000, respectively.

4. Equipment and Patent and License Rights

Equipment balances are summarized as follows:

| | Dec |
|---|---|
| | 2001 |
| Machinery and equipment | $ 251,517 |
| Computer equipment | 367,461 |
| Furniture and fixtures | 93,388 |
| Leasehold improvements | 103,073 |
| Total | 815,439 |
| Accumulated depreciation | (473,158) |
| Total equipment, net | $ 342,281 |

Depreciation expense for 2001, 2000 and 1999 was $128,523, $473,122, and $648,565, respectively.

Patent and license rights balances are summarized as follows:

| | Dec |
|---|---|
| | 2001 |
| Patent and license rights | $ 365,096 |
| Accumulated amortization | (74,527) |
| Patent and license rights, net | $ 290,569 |

Amortization expense for 2001, 2000, and 1999 was $22,412, $96,864, and $92,837, respectively.



5. Common Stock

On February 21, 2001, the Company completed a Rights Offering to its shareholders. The Company issued an aggregate of 6,246,735 shares of common stock at $1 per share. Net proceeds from the offering, after expenses, were $6,031,995.

In September 2001, the Board of Directors authorized the repurchase of up to 1,300,000 shares of the Company's common stock. At the discretion of management, the repurchase program can be implemented through open market or privately negotiated transactions at prevailing prices. The Company will determine the time and extent of repurchases based on its evaluation of market conditions and other factors. During the twelve months ended December 31, 2001, the Company repurchased from a Director of the Company 76,000 shares at a cost of $1 per share.

6. Preferred Stock

The Company has authorized 10 million shares of preferred stock, no par value. The preferred stock may be issued from time to time in one or more series.

On February 21, 1999 the Company adopted a Shareholder Rights Plan under which all shareholders of record as of March 8, 1999 received rights to purchase shares of a new series of Preferred Stock. The adoption of this plan is intended as a means to guard against abusive takeover tactics. The rights will be exercisable only if a person or group acquires or announces a tender offer to acquire 20% or more of the Company's common stock. Under the plan all shareholders except the purchaser will be entitled to acquire the Company's common stock at a 50% discount. The rights will trade with the Company's common stock, unless and until they are separated upon the occurrence of certain future events.

7. Compensation

Stock Option Plans

In 1996, the Company adopted the 1996 Stock Option Plan of C3, Inc. ("1996 Option Plan") under which options to acquire 777,450 common shares, reduced by the number of options granted outside the 1996 Option Plan, may be granted to key employees, directors and independent consultants. Under the 1996 Option Plan, both incentive and non-qualified options may be granted under terms and conditions established by the compensation committee of the board of directors. The exercise price for incentive options will be the fair market value of the related common stock on the date the option is granted. Options granted under the 1996 Option Plan generally vest equally over a three-year period and have terms of 10 years. The Company currently has no plans to award additional options under the 1996 Option Plan.

In 1997, the Company adopted the 1997 Omnibus Stock Plan of C3, Inc. (the "1997 Omnibus Plan"). The 1997 Omnibus Plan authorizes the Company to grant stock options, stock appreciation rights and restricted 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. The maximum number of shares of common stock for which awards may be granted under the 1997 Omnibus Plan may be increased from time to time to a number of shares equal to (i) 20% of the shares of common stock outstanding as of that time less (ii) the number of shares of common stock subject to outstanding options under the 1996 Option Plan. The number of shares reserved for issuance under the 1997 Omnibus Plan may also be adjusted upon certain events affecting the Company's capitalization. Options granted under the 1997 Omnibus Plan generally vest over three to five-year periods and have terms of 10 years. The Board of Directors has reserved 1,330,912 shares for the 1997 Omnibus Plan.

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The following is a summary of activity for the Company's two stock option plans:

| | 1996 Option Plan | |
|---|---|---|
| | Number Of Shares | Weighted-Average Exercise Price |
| 1999 | | |
| Outstanding at beginning of year | 554,865 | $ 3.78 |
| Granted | -- | -- |
| Exercised | 92,620 | 3.49 |
| Canceled | -- | -- |
| Outstanding at end of year | 462,245 | 3.83 |
| 2000 | | |
| Granted | -- | -- |
| Exercised | 102,068 | 2.89 |
| Canceled | -- | -- |
| Outstanding at end of year | 360,177 | 4.10 |
| 2001 | | |

| | | |
|---|---|---|
| Granted | -- | -- |
| Exercised | -- | -- |
| Canceled | 5,745 | 4.04 |
| Outstanding at end of year | 354,432 | $ 4.10 |

The following summarizes information about stock options outstanding at December 31, 2001:

| | Options Outstanding | | | Opt |
|---|---|---|---|---|
| Range of Exercise Price | Outstanding as of 12/31/2001 | Weighted-Average Remaining Contractual Life | Weighted- Average Exercise Price | Exercisab as of 12/31/20 |
| \$0.00- \$1.64 | 291,800 | 7.9 | \$ 1.1900 | 111 |
| \$1.65- \$3.28 | 102,742 | 3.5 | \$ 2.5557 | 81 |
| \$3.29- \$4.93 | 283,290 | 4.3 | \$ 4.5053 | 283 |
| \$4.94- \$6.57 | 111,700 | 3.8 | \$ 5.3750 | 70 |
| \$6.58- \$8.22 | 55,300 | 6.2 | \$ 7.7957 | 53 |
| \$8.23- \$9.86 | 108,100 | 5.2 | \$ 8.8905 | 104 |
| \$9.87-\$11.51 | 13,600 | 6.1 | \$ 10.8100 | 13 |
| \$11.52-\$13.14 | --- | --- | \$ --- | |
| \$13.15-\$14.79 | 168,600 | 3.9 | \$ 13.8659 | 168 |
| \$14.80-\$16.44 | 236,500 | 5.3 | \$ 15.0000 | 142 |
| | 1,371,632 | 5.3 | \$ 7.2257 | 1,028 |

In accordance with APB 25, and the provision of FAS 123 as applicable to consultants, the Company recorded compensation expense of approximately $37,000, $149,000 and $283,000 during 2001, 2000, and 1999, respectively, relating to stock options granted with exercise prices less than market value or granted to consultants. Had compensation expense for all stock options been determined consistent with FAS 123, rather than APB 25, the Company's net income (loss) and income (loss) per share for the years



ended December 31, 2001, 2000, and 1999 would have been recorded to the pro forma amounts indicated below:

| | 2001 | 2000 |
|---|---|---|
| Net income (loss), as reported | \$ 1,224,735 | \$ (7,078,532) |
| Pro forma net income (loss) | 1,137,035 | (7,316,709) |
| Basic and diluted net income (loss) per share: | | |
| As reported | \$ 0.10 | \$ (0.99) |
| Pro forma | 0.09 | (1.02) |

The fair value of each option grant is estimated on the grant date using a Black-Scholes option pricing model. The valuations for the years ended December 31, 2001, 2000 and 1999 were based on the following assumptions:

| | 2001 | 2000 |
|---|---|---|
| Weighted-average grant date fair value | $ 0.91 | $ 4.04 |
| Weighted-average expected lives (in years) | 7.00 | 7.00 |
| Risk-free interest rate | 3.12-5.32% | 4.74% |
| Dividend yield | 0% | 0% |
| Volatility factor | .977-1.006 | 1.723 |

In connection with the Company's initial public offering on November 14, 1997, the Company issued warrants to the underwriter to purchase 300,000 shares of common stock at a price of $18 per share. The warrants are exercisable for a period of four years beginning November 14, 1998.

Other

In 2001, the Company adopted the 2001 Executive Compensation Plan. This plan offers key employees of the Company incentive awards in the form of cash payments, and/or stock option grants based upon the Company's attainment of certain performance goals. For 2001, $42,000 in cash payments were recorded as general and administration expenses and 91,000 stock options were granted under the plan. No compensation was recorded for the stock options granted under the plan.

8. Income Taxes

The Company accounts for income taxes under the liability method in accordance with FAS 109. Under the liability method, deferred income taxes are recognized for the tax consequences of "temporary differences" by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities.

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

| | December 31 | |
|---|---|---|
| | 2001 | |
| Federal and state loss carryforwards | $ 7,394,000 | $ |
| Benefit of research tax credits | 416,000 | |
| Reserves and accruals | 326,000 | |
| Depreciation | (31,000) | |
| Total deferred tax assets | 8,105,000 | |
| Less valuation allowance | (8,105,000) | |

| | | |
|---|---|---|
| Net deferred tax assets | $ 0 | $ |

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A reconciliation between expected income taxes, computed at the statutory federal income tax rate (34%) applied to pretax accounting income, and the income taxes included in the statements of operations for the years ended December 31, 2001, 2000 and 1999 follows:

| | 2001 | 2000 |
|---|---|---|
| Anticipated income tax expense (benefit) at the statutory federal rate | $ 416,000 | $ (2,407,000) |
| State income tax expense (benefit), net of federal tax effect | 56,000 | (322,000) |
| Research tax credits | ---- | (61,000) |
| Compensation expense--stock options | 14,000 | 58,000 |
| Foreign subsidiary expense included in books | 128,000 | ---- |
| Other | 111,000 | 125,000 |
| Increase (decrease) in valuation allowance | (725,000) | 2,607,000 |
| Income tax (benefit) expense | $ 0 | $ 0 |

At December 31, 2001, the Company has operating and economic loss carryforwards of approximately $19,179,000 expiring through 2016, which can be offset against future federal and state taxable income. In accordance with Section 382 of the Internal Revenue Code of 1986, as amended, a change in equity ownership of greater than 50% of the Company within a three-year period results in an annual limitation on the Company's ability to utilize its NOL carryforwards that were created during tax periods prior to the change in ownership. As a result of various equity offerings and certain shareholder transactions, the utilization of a portion of the Company's NOL carryforwards has become limited, however, the Company does not believe this limitation will have a material effect on the Company's ability to utilize the NOL carryforward.

Based on the Company's assessment of the future net realizable value of deferred tax assets, a valuation allowance has been provided as it is more likely than not that sufficient taxable income will not be generated to realize certain temporary differences and tax credit carryforwards. Additionally, at December 31, 2001, approximately $350,000 of the valuation allowance was attributable to the potential tax benefit of stock option transactions, which will be credited directly to common stock if realized.

9. Commitments

Operating Lease

The Company leases approximately 12,700 square feet of mixed use space from an unaffiliated third party at a base cost of approximately $11,000 per month, plus contingent rentals based on the Company's proportionate share of the lessor's operating costs, as defined in the lease agreement. The lease expires August 31, 2004, and provides for escalations of the base rent throughout the lease term, up to $11,700 at September 1, 2003.

The future minimum lease payments are as follows: $134,000 in 2002, $138,000 in 2003, $93,000 in 2004, totaling $365,000. Rental expense incurred for operating leases and leases whose terms are less than one year in duration for 2001, 2000, and 1999 was approximately $190,000, $405,000, and $215,000, respectively.

Purchase Commitment

On June 6, 1997, the Company entered into an Amended and Restated Exclusive Supply Agreement ("Exclusive Supply Agreement") and a Development Agreement with Cree, a related company. The Exclusive Supply Agreement has an initial term of ten years which may be extended for an additional ten years by either party if the Company orders in any 36-month period SiC crystals with an aggregate purchase price in excess of $1 million. The Company has met this order threshold and expects to extend the term of the Exclusive Supply Agreement. In connection with the Exclusive Supply Agreement, the Company has committed to purchase a minimum of 50% (by dollar volume) of its requirements for SiC crystals from Cree. If the Company's orders require Cree to expand beyond specified production levels,

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the Company must commit to purchase certain minimum quantities. In January 2002, the Company and Cree agreed to a framework for purchases of SiC crystals during 2002. Under the terms of the Agreement, the Company will be obligated to purchase a minimum quantity of usable material on a quarterly basis if Cree meets certain minimum quality levels. Dependent upon the quality of material received, purchases from Cree during 2002 will be between $900,000 and $3.7 million. The Company is totally dependent on Cree to supply SiC crystals for its production process. If the Company is unable to obtain SiC crystals from Cree, its operations would be materially adversely affected.

The July 1, 1998 Development Agreement, provides for a four-year development effort by Cree to increase the yield of useable material in each SiC crystal manufactured by Cree for use by the Company in the production of moissanite jewels. The Company was initially obligated to pay Cree approximately $2.88 million annually through June 30, 2002 under this agreement which was reduced to $1.44 million annually effective October 1, 1999. However, either party may terminate the agreement if Cree does not meet the annual performance milestones or if the Company and Cree do not mutually agree on the performance milestones for the ensuing year. The Company's funding obligations under the Development Agreement were suspended from January 2001 through December 31, 2002, and will be terminated upon the Company purchasing in 2002 certain minimum levels of material.

During 2001, 2000, and 1999, the Company made purchases from Cree of approximately $1.2 million, $12.0 million, and $16.2 million, respectively, for SiC materials and research and development costs.

10. Selected Quarterly Data (Unaudited)

| | Quarte | |
|---|---|---|
| | 3/31 | 6/30 |
| Year Ended December 31, 2001 | | |

| | | |
|---|---|---|
| Net sales | $ 2,899,984 | $ 2,462,732 |
| Gross profit | 1,637,285 | 1,378,643 |
| Net income (loss) | 247,174 | 359,044 |
| Basic & diluted net income (loss) per share | 0.03 | 0.03 |
| Year Ended December 31, 2000 | | |
| Net sales | $ 3,011,250 | $ 3,647,621 |
| Gross profit | 1,634,502 | 1,991,190 |
| Net income (loss) | (2,110,161) | (1,250,510) |
| Basic & diluted net income (loss) per share | (0.30) | (0.17) |



Schedule II

Charles & Colvard, Ltd.

Valuation and Qualifying Accounts

| Year ended December 31 | Balance at Beginning of Period | Additions Charged to Costs and Expenses | Collections of Accounts Previously Written Off | Deductions/ Write Offs |
|---|---|---|---|---|
| Allowance for Doubtful Accounts | | | | |
| 2001 | $ 320,000 | $ ---- | $ 5,914 | $ 50,914(1) |
| 2000 | $ 70,000 | $ 301,562 | $ ---- | $ 51,562(1) |
| 1999 | $ 77,000 | $ 2,298 | $ ---- | $ 9,298(1) |
| Reserve for Excess Inventory | | | | |
| 2001 | $ 770,000 | $ ---- | $ ---- | $135,000(2) |
| 2000 | $ 242,115 | $ 527,885 | $ ---- | $ ---- |
| 1999 | $ 132,000 | $ 224,083 | $ ---- | $113,968(2) |
| Allowance for Returns | | | | |
| 2001 | $ 150,000 | $ ---- | $ ---- | $ 45,000(4) |
| 2000 | $ 66,000 | $ 84,000(3) | $ ---- | $ ---- |
| 1999 | $ 34,004 | $ 31,996(3) | $ ---- | $ ---- |

(1) Amounts in 1999 and 2000 are accounts written off as uncollectible. During 2001, there was $15,685 of accounts written off as uncollectible. In addition, during 2001, there was a $35,229 decrease to the allowance to reflect the estimated collectibility of receivables.
(2) Adjustments to reserve to reflect estimated net realizable value of remaining inventory.
(3) Charged against sales.
(4) Adjustments to allowance; credit to sales.

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

None.

Part III

Item 10. Directors and Executive Officers of the Registrant

Item 11. Executive Compensation

Item 12. Security Ownership of Certain Beneficial Owners and Management

Item 13. Certain Relationships and Related Transactions

The information called for in items 10 through 13 is incorporated by reference from our definitive proxy statement relating to our annual meeting of shareholders, which will be filed with the Securities and Exchange Commission within 120 days after the end of fiscal 2001.

Part IV

Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a) (1) and (2) Financial statements and financial statement schedule--the financial statements, financial statements schedule, and report of independent accountants are filed as part of this report (see Index to Financial Statements at Part II Item 8 on page 29 of this Form 10-K).

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

| Exhibit Number | Description |
|---|---|
| 3.1 | Amended and Restated Articles of Incorporation of C3, Inc. which is hereby incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809). |
| 3.2 | Articles of Amendment of C3, Inc., as filed with the Secretary of State of North Carolina on February 23, 1999 which hereby is incorporated by reference to Exhibit 3.2 to the Annual Report on Form 10-K of C3, Inc. for the fiscal year ended December 31, 1998. |
| 3.3 | Amended and Restated Bylaws of C3, Inc. which is hereby incorporated by reference to Exhibit 3.2 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333- 36809). |
| 3.4 | Articles of Amendment to the Company's Articles of Incorporation, as filed May 17, 2000 which is hereby incorporated by reference to Exhibit 3.4 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2000. |
| 4.1 | Specimen Certificate of common stock which is hereby incorporated by reference to Exhibit 4.1 to the Annual Report on Form 10-K of C3, Inc. for the fiscal year ended December 31, 1998. |

4.2 Form of Representative's Warrant which is hereby incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333- 36809).

4.3 Rights Agreement dated as of February 22, 1999 between C3, Inc. and First Union National Bank as Rights Agent, including the Form of Rights Certificate as Exhibit A which is hereby incorporated by reference to Exhibit 4.3 to the Annual Report of C3, Inc. for the fiscal year ended December 31, 1998.

10.1 Consulting Agreement, dated May 1, 1997, between Kurt Nassau and C3, Inc. which is hereby incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).+

10.2 Letter Agreement, dated May 17, 1997, between Kurt Nassau and C3, Inc. which is hereby incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).+

10.11 Amended and Restated Exclusive Supply Agreement, dated June 6, 1997, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.11 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).*

10.12 Development Agreement, dated as of June 6, 1997, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.12 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).*

10.13 Letter Agreement, dated July 14, 1997, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.13 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).*

10.14 Letter Agreement, dated January 31, 1996, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).*

10.15 1996 Stock Option Plan of C3, Inc. (as amended October 27, 1997) which is hereby incorporated by reference to Exhibit 10.15 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).+

10.16 1997 Omnibus Stock Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 10.16 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333- 36809).+

10.18 Shareholders Agreement, dated March 18, 1997, between General Electric Pension Trust, C. Eric Hunter and C3, Inc. which is hereby incorporated by reference to Exhibit 10.18 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).

10.19 Registrations Rights Agreement, dated March 18, 1997, between General Electric Pension Trust and C3, Inc. which is hereby incorporated by reference to Exhibit 10.19 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).

10.20 Agreement, dated September 24, 1997, between John M. Bachman, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.20 to the Registration Statement on Form S-1 of C3, Inc. (File No.

333-36809).*



10.22 1997 Declaration of Amendment to 1997 Omnibus Stock Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 99.3 to the Registration Statement on Form S-8 of C3, Inc. (File No. 333-43613).+

10.23 Supplemental Development Agreement, dated January 8, 1998, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.23 to the Annual Report on Form 10-K of C3, Inc. for the fiscal year ended December 31, 1997.*

10.24 Letter Agreement, dated January 8, 1998, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.24 to the Annual Report on From 10-K of C3, Inc. for the Fiscal year ended December 31, 1997.*

10.25 Amended and Restated Development Agreement, dated July 1, 1998 between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.25 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended June 30, 1998.*

10.26 Letter Agreement dated, July 14, 1998, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.26 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended June 30, 1998.*

10.28 First Amendment to Agreement, dated March 23, 1998 between John M. Bachman, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.28 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended September 30, 1998.*

10.29 Second Amendment to Agreement, dated September 28, 1998 between John M. Bachman, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.29 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended September 30, 1998.*

10.30 1998 Declaration of Amendment to 1996 Stock Option Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 10.30 to the Annual Report on Form 10K of C3, Inc. for the fiscal year ended December 31, 1998. +

10.31 1998 Declaration of Amendment to 1997 Omnibus Stock Plan of C3, Inc., which is hereby incorporated by reference to Exhibit 10.31 to the Annual Report on Form 10K of C3, Inc. for the fiscal year ended December 31, 1998. +

10.32 Employment Agreement, dated March 1, 1999, between Robert Thomas and C3, Inc., which is hereby incorporated by reference to Exhibit 10.32 to the Annual Report on Form 10K of C3, Inc. for the fiscal year ended December 31, 1998. +

10.34 Letter Agreement, dated May 3, 1999 between Cree Research, Inc. and C3, Inc., which is hereby incorporated by reference to Exhibit 10.34 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended March 31, 1999. *

10.35 Licensing Agreement, dated October 10, 1998, between C. Eric Hunter and C3, Inc., which is hereby incorporated by reference to Exhibit 10.35 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended March 31, 1999. *

10.36 Third Amendment to Agreement, dated June 16, 1999, between John M. Bachman, Inc. and C3, Inc., which is hereby incorporated by reference to Exhibit 10.36 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended June 30, 1999. *

10.37 Fourth Amendment to Agreement, dated October 5, 1999, between John M. Bachman, Inc. and C3, Inc., which is hereby incorporated by reference to Exhibit 10.37 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended September 30, 1999. *



10.39 Letter Agreement dated December 22, 1999 between Cree, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.39 to the Annual Report on form 10K of C3, Inc. for the year ended December 31, 1999.*

10.40 Letter Agreement dated March 16, 2000 between Stuller Settings, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.40 to the Annual Report on form 10K of C3, Inc. for the year ended December 31, 1999.*

10.41 Letter Agreement dated March 15, 2000 between The Bell Group, d/b/a Rio Grande and C3, Inc. which is hereby incorporated by reference to Exhibit 10.41 to the Annual Report on form 10K of C3, Inc. for the year ended December 31, 1999.*

10.42 Letter Agreement dated May 14, 2000 between Cree, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.42 to the Quarterly Report on Form 10Q of C3, Inc. for the quarter ended March 31, 2000.*

10.43 2000 Declaration of Amendment to 1996 Omnibus Stock Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 10.43 to the Annual Report on Form 10K of Charles & Colvard, Ltd. for the year ended December 31, 2000.+

10.44 2000 Declaration of Amendment to 1997 Omnibus Stock Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 10.44 to the Annual Report on Form 10K of Charles & Colvard, Ltd. for the year ended December 31, 2000.+

10.45 Letter Agreement dated December 7, 2000 between Cree, Inc. and Charles & Colvard, Ltd. which is hereby incorporated by reference to the Exhibit 99.2 of the Company's current report on Form 8-K dated January 9, 2001.*

10.46 Fifth Amendment to Agreement, dated December 29, 2000 between John M. Bachman, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.46 to the Quarterly Report on Form 10Q of Charles & Colvard, Ltd. for the quarter ended March 31, 2001.*

10.47 Charles & Colvard, Ltd. Fiscal Year 2001 Executive Compensation Plan which is hereby incorporated by reference to Exhibit 10.47 to the Quarterly Report on Form 10Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2001.+

10.48 Employment Agreement between James R. Braun, CFO and Charles & Colvard, Ltd. which is hereby incorporated by reference to Exhibit 10.48 to the

Quarterly Report on Form 10Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2001.+

10.49 Letter Agreement dated July 2, 2001 between Cree, Inc. and Charles & Colvard, Ltd. which is hereby incorporated by reference to Exhibit 10.49 to the Quarterly Report on Form 10Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2001.*

10.50 Letter Agreement dated March 8, 2002 between Cree, Inc. and Charles & Colvard, Ltd.*

21.1 Schedules of Subsidiaries

23.1 Consent of Deloitte & Touche LLP

* The registrant has requested that certain portions of this exhibit be given confidential treatment.

+ Denotes a management contract or compensatory plan or arrangement.

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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.

By: /s/ Robert S. Thomas Date: 3/22/02

Robert S. Thomas, President & CEO

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.

By: /s/ Robert S. Thomas Date: 3/22/02

Robert S. Thomas
President & Chief Executive Officer
(Principal executive officer)

By: /s/ James R. Braun Date: 3/22/02

James R. Braun
Vice President of Finance & Chief Financial Officer
(Principal accounting officer)

By: /s/ Walter J. O'Brien Date: 3/22/02

Walter J. O'Brien
Director

By: /s/ Chester L. F. Paulson Date: 3/22/02

Chester L. F. Paulson
Director

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| By: /s/ Frederick A. Russ<br>Frederick A. Russ<br>Director | Date: 3/22/02 |
| By: /s/ George A. Thornton, III<br>George A. Thornton, III<br>Director | Date: 3/22/02 |



EXHIBIT INDEX
TO
ANNUAL REPORT ON FORM 10-K
OF
CHARLES & COLVARD, LTD. (FORMERLY C3, INC.)

| Exhibit Number | Description |
|---|---|
| 3.1 | Amended and Restated Articles of Incorporation of C3, Inc. which is hereby incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809). |
| 3.2 | Articles of Amendment of C3, Inc., as filed with the Secretary of State of North Carolina on February 23, 1999 which is hereby incorporated by reference to Exhibit 3.2 to the Annual Report on Form 10-K of C3, Inc. for the fiscal year ended December 31, 1998. |
| 3.3 | Amended and Restated Bylaws of C3, Inc. which is hereby incorporated by reference to Exhibit 3.2 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333- 36809). |
| 3.4 | Articles of Amendment to the Company's Articles of Incorporation, as filed May 17, 2000 which is hereby incorporated by reference to Exhibit 3.4 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2000. |
| 4.1 | Specimen Certificate of common stock which is hereby incorporated by reference to Exhibit 4.1 to the Annual Report on Form 10-K of C3, Inc. for the fiscal year ended December 31, 1998. |
| 4.2 | Form of Representative's Warrant which is hereby incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333- 36809). |
| 4.3 | Rights Agreement dated as of February 22, 1999 between C3, Inc. and First Union National Bank as Rights Agent, including the Form of Rights Certificate as Exhibit A which is hereby incorporated by reference to Exhibit 4.3 to the Annual Report of C3, inc. for the fiscal year ended December 31, 1998. |
| 10.1 | Consulting Agreement, dated May 1, 1997, between Kurt Nassau and C3, Inc. which is hereby incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).+ |
| 10.2 | Letter Agreement, dated May 17, 1997, between Kurt Nassau and C3, Inc. |

which is hereby incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).+

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| 10.11 | Amended and Restated Exclusive Supply Agreement, dated June 6, 1997, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.11 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).* |
| 10.12 | Development Agreement, dated as of June 6, 1997, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.12 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).* |
| 10.13 | Letter Agreement, dated July 14, 1997, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.13 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).* |



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| 10.14 | Letter Agreement, dated January 31, 1996, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).* |
| 10.15 | 1996 Stock Option Plan of C3, Inc. (as amended October 27, 1997) which is hereby incorporated by reference to Exhibit 10.15 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).+ |
| 10.16 | 1997 Omnibus Stock Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 10.16 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333- 36809).+ |
| 10.18 | Shareholders Agreement, dated March 18, 1997, between General Electric Pension Trust, C. Eric Hunter and C3, Inc. which is hereby incorporated by reference to Exhibit 10.18 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809). |
| 10.19 | Registrations Rights Agreement, dated March 18, 1997, between General Electric Pension Trust and C3, Inc. which is hereby incorporated by reference to Exhibit 10.19 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809). |
| 10.20 | Agreement, dated September 24, 1997, between John M. Bachman, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.20 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).* |
| 10.21 | Agreement, dated September 12, 1997, between QMD, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.21 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809).* |
| 10.22 | 1997 Declaration of Amendment to 1997 Omnibus Stock Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 99.3 to the Registration Statement on Form S-8 of C3, Inc. (File No. 333-43613).+ |
| 10.23 | Supplemental Development Agreement, dated January 8, 1998, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.23 to the Annual Report on Form 10-K of C3, Inc. for the fiscal year ended December 31, 1997.* |

10.24 Letter Agreement, dated January 8, 1998, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.24 to the Annual Report on From 10-K of C3, Inc. for the Fiscal year ended December 31, 1997.*

10.25 Amended and Restated Development Agreement, dated July 1, 1998 between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.25 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended June 30, 1998.*

10.26 Letter Agreement dated, July 14, 1998, between Cree Research, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.26 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended June 30, 1998.*

10.28 First Amendment to Agreement, dated March 23, 1998 between John M. Bachman, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.28 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended September 30, 1998.*

10.29 Second Amendment to Agreement, dated September 28, 1998 between John M. Bachman, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.29 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended September 30, 1998.*



10.30 1998 Declaration of Amendment to 1996 Stock Option Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 10.30 to the Annual Report on Form 10K of C3, Inc. for the fiscal year ended December 31, 1998. +

10.31 1998 Declaration of Amendment to 1997 Omnibus Stock Plan of C3, Inc., which is hereby incorporated by reference to Exhibit 10.31 to the Annual Report on Form 10K of C3, Inc. for the fiscal year ended December 31, 1998. +

10.32 Employment Agreement, dated March 1, 1999, between Robert Thomas and C3, Inc., which is hereby incorporated by reference to Exhibit 10.32 to the Annual Report on Form 10K of C3, Inc. for the fiscal year ended December 31, 1998. +

10.34 Letter Agreement, dated May 3, 1999 between Cree Research, Inc. and C3, Inc., which is hereby incorporated by reference to Exhibit 10.34 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended March 31, 1999. *

10.36 Third Amendment to Agreement, dated June 16, 1999, between John M. Bachman, Inc. and C3, Inc., which is hereby incorporated by reference to Exhibit 10.36 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended June 30, 1999. *

10.37 Fourth Amendment to Agreement, dated October 5, 1999, between John M. Bachman, Inc. and C3, Inc., which is hereby incorporated by reference to Exhibit 10.37 to the Quarterly Report on Form 10-Q of C3, Inc. for the quarter ended September 30, 1999. *

10.39 Letter Agreement dated December 22, 1999 between Cree, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.39 to the Annual

Report on form 10K of C3, Inc. for the year ended December 31, 1999.*

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| 10.40 | Letter Agreement dated March 16, 2000 between Stuller Settings, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.40 to the Annual Report on form 10K of C3, Inc. for the year ended December 31, 1999.* |
| 10.41 | Letter Agreement dated March 15, 2000 between The Bell Group, d/b/a Rio Grande and C3, Inc. which is hereby incorporated by reference to Exhibit 10.41 to the Annual Report on form 10K of C3, Inc. for the year ended December 31, 1999.* |
| 10.42 | Letter Agreement dated May 14, 2000 between Cree, Inc. and C3, Inc. which is hereby incorporated by reference to Exhibit 10.42 to the Quarterly Report on Form 10Q of C3, Inc. for the quarter ended March 31, 2000.* |
| 10.43 | 2000 Declaration of Amendment to 1996 Omnibus Stock Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 10.43 to the Annual Report on Form 10K of Charles & Colvard, Ltd. for the year ended December 31, 2000.+ |
| 10.44 | 2000 Declaration of Amendment to 1997 Omnibus Stock Plan of C3, Inc. which is hereby incorporated by reference to Exhibit 10.44 to the Annual Report on Form 10K of Charles & Colvard, Ltd. for the year ended December 31, 2000.+ |
| 10.45 | Letter Agreement dated December 7, 2000 between Cree, Inc. and Charles & Colvard, Ltd. which is hereby incorporated by reference to the Exhibit 99.2 of the Company's current report on Form 8-K dated January 9, 2001.* |



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|---|---|
| 10.46 | Fifth Amendment to Agreement, dated December 29, 2000 between John M. Bachman, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.46 to the Quarterly Report on Form 10Q of Charles & Colvard, Ltd. for the quarter ended March 31, 2001.* |
| 10.47 | Charles & Colvard, Ltd. Fiscal Year 2001 Executive Compensation Plan which is hereby incorporated by reference to Exhibit 10.47 to the Quarterly Report on Form 10Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2001.+ |
| 10.48 | Employment Agreement between James R. Braun, CFO and Charles & Colvard, Ltd. which is hereby incorporated by reference to Exhibit 10.48 to the Quarterly Report on Form 10Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2001.+ |
| 10.49 | Letter Agreement dated July 2, 2001 between Cree, Inc. and Charles & Colvard, Ltd. which is hereby incorporated by reference to Exhibit 10.49 to the Quarterly Report on Form 10Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2001.* |
| 10.50 | Letter Agreement dated March 8, 2002 between Cree, Inc. and Charles & Colvard, Ltd.* |
| 21.1 | Schedule of Subsidiaries |

23.1    Consent of Deloitte & Touche LLP

* The registrant has requested that certain portions of this exhibit be given confidential treatment.

+ Denotes a management contract or compensatory plan or arrangement.