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

FORM 10-K

(Mark One)

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2004

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
(State or other jurisdiction
of incorporation)

56-1928817
(I.R.S. Employer
Identification No.)

300 Perimeter Park Drive, Suite A, Morrisville, N.C.
(Address of principal executive offices)

27560
(Zip Code)

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

Securities registered pursuant to Section 12(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 No .

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

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2) Yes No .

The aggregate market value of the voting stock held by non-affiliates of the Registrant as of June 30, 2004 was \$71,657,646.

On February 28, 2005, there were 13,515,318 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 23, 2005 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 our ability to manage growth effectively, our early stage of development, our dependence on continued growth and consumer acceptance of our products, any trends in the general economy that would adversely affect consumer spending, risks of conducting significant operations in foreign countries 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. We obtain the substantial majority of our SiC crystals from Cree, Inc. In February 2005 we established a new relationship for the supply of SiC with Norstel AB, a Swedish Company that has demonstrated an ability to produce suitable SiC in limited quantities. We have certain exclusive supply rights with Cree and Norstel AB for SiC 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 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.

The improved supply of SiC crystals along with lower than expected sales led to a significant increase in inventories of moissanite jewels. Inventory increased to \$23.1 million at December 31, 2000 from \$14.8 million at December 31, 1999. During 2001, 2002, and 2003, we purchased \$1.2 million, \$5.5 million, and \$6.0 million of raw materials, respectively. In 2004, raw material purchases were \$6.0 million. To accommodate our need for additional inventory of selected shapes and sizes and to support anticipated growth, we anticipate raw material purchases to increase to over \$8.0 million in 2005.

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.

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Primarily as a result of our investment in this program, our net losses were \$5.2 million and \$7.1 million in 1999 and 2000, respectively, as inventories increased to \$23.1 million at December 31, 2000 and cash equivalents decreased to \$3.8 million at December 31, 2000. During 2000, the Company's current Chief Executive Officer was elected and a number of strategic sales, marketing and financial steps were taken. On February 21, 2001, the Company completed a rights offering of common stock to its shareholders at \$1 per share, raising net proceeds of approximately \$6.0 million. During 2001, the global marketing 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 and phased out of the direct sales to retail jewelers. We have also entered into several agreements with domestic jewelry manufacturers, including K&G Creations and Reeves Park, which were our two largest customers in 2004. Through these agreements with distributors 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.

Starting in 2002, we supported the efforts of our customers in expanding and developing distribution with several notable retailers, including ShopNBC, Shop At Home, Landau, Army Air Force Exchange System, and Morgan Jewelers. During 2003 and 2004, we developed and implemented a testing template that we believe enables us to gain distribution. Generally, we seek to participate with the retailers in training their sales and marketing personnel in moissanite sales positioning and strategies and in working with them to create focused advertising and promotional efforts to publicize "trunk shows" and other special sales events at the test store locations. During 2004, this template was used in conjunction with the rollout of moissanite into 462 stores of our largest new retail chain, JCPenney. In March 2005, JCPenney began offering moissanite in 241 additional stores.

While we have expended most of our resources on the domestic market, we have continued to invest in certain international markets that we believe show the most potential. 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 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. To enhance our presence in this market, we established a Charles & Colvard controlled company in China in August 2003. Since 2000, foreign sales have ranged from 13% to 16% of total sales.

After incurring losses in 1999 and 2000, our goal for 2001 was to become profitable 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 by 10%. Since 2001, our strategy has been to achieve sales growth and to maintain profitability. We achieved both of those goals in 2002 with a 44% growth in sales and pretax income of \$2.8 million. We remained profitable during 2003, on 4% sales growth. Our goal for 2004 was to increase sales while remaining profitable. We achieved both of these goals by increasing sales 39% over 2003 levels and attaining \$3.2 million in pretax income. Our goal for 2005 is to build on the success of 2004 and further increase sales while maintaining profitability.

The Jewelry Market

According to preliminary estimates provided by the Rapaport Research Group, the consumer market in 2004 for fine jewelry sales in the United States was approximately \$47 billion, approximately \$24 billion of which were diamond jewelry sales.

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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, jewelry store chains, online, TV shopping channels 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 jewel. 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.

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

Comparison Chart (1)

Description	Refractive Index	Dispersion	Luster	Hardness (Mohs Scale) (2)	Toughness
Charles & Colvard created Moissanite ⁽³⁾	2.65-2.69	0.104	20.4%	9 1/4	Excellent
Diamond	2.42	0.044	17.2%	10	Good*
Cubic Zirconia (CZ)	2.17	0.060	13.6%	8 1/2	Good
Ruby	1.77	1.018	7.7%	9	Excellent**
Sapphire	1.77	0.018	7.7%	9	Excellent**
Emerald				7	
	1.58	0.014	5.1%	1/2 1/2	Good to Poor

* In cleavage direction, otherwise excellent

** Except twinned stones

- 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.
- 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.
- 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.

Products and Product Development

Moissanite Jewels. We primarily sell near-colorless moissanite jewels cut in a variety of shapes including round, princess, radiant, oval, marquise, heart, cushion, square brilliant, pear and trillion shapes in sizes ranging from 2 to 10mm (approximately .03 to 3.1 carats). We distribute 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 and 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 signed an agreement on February 14, 2005 with Norstel AB for the purchase of SiC as further described below, the initial quantities to be received from Norstel AB are such that, we are dependent on Cree for the substantial majority of the supply of lab-grown SiC crystals. We are obligated to purchase a minimum quantity of

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usable material on a quarterly basis if Cree meets certain minimum quality levels. We purchased \$6.0 million of material during both 2003 and 2004 and anticipate purchasing over \$8.0 million of material from Cree in 2005.

Under the Exclusive Supply Agreement, Cree has agreed not to sell SiC crystals for gemstone applications to anyone other than us. 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. 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 from Cree 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 had an initial term through June 2005, and on January 6, 2005 we exercised our option to extend the Agreement until July 2015.

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) or successor;
- 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.

Exclusive Supply Agreement with Norstel AB

On February 14, 2005 we entered into an Exclusive Supply Agreement with Norstel AB (formerly Jesperator AB) for the supply of SiC for use in the manufacturing of moissanite jewels. The initial term of the contract is for three years, and involves the supply of material worth a minimum of approximately \$4.0 million.

The agreement gives Charles & Colvard the exclusive right to purchase silicon carbide from Norstel for the purpose of fabricating, distributing or selling faceted jewels. Norstel's operations are currently located on the premises of Linkoping University in Sweden, where it has focused on the development of SiC ingots, wafers and epitaxy. In addition Charles & Colvard has advanced \$400,000 towards the purchase of certain equipment. This advance is scheduled to be repaid starting January 2006 through a 35% reduction on the invoice for subsequent purchases of SiC crystals. The minimum purchase commitment during 2005 is relatively small at approximately \$200,000 while Norstel's recently announced silicon carbide plant in Norrkoping, Sweden is being constructed. As the plant becomes operational in 2006 deliveries are scheduled to increase. The

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agreement provides Charles & Colvard an option to extend the term of the agreement for a four year period. Certain technology used in Norstel's manufacturing process has been sublicensed to Norstel by Charles & Colvard. This technology was originally licensed to Charles & Colvard by Cree, and can only be sublicensed by Charles & Colvard for use in the production of SiC for Charles & Colvard.

Moissanite/Diamond Test Instrument. In 1998, we introduced a 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. With the introduction of this test equipment, we achieved our goal of assuring a reliable means for the jewelry industry to distinguish moissanite from diamond. Therefore, during 2002, we sold our entire tester inventory and licensed the related patents to a major customer, who will handle the future manufacture and distribution of testers.

GeoLink. On December 15, 2003, we announced that we entered into a Memorandum of Understanding ("MOU") with GeoLink™ Technologies of Oxnard Shores, CA to supply faceted moissanite jewels and provide technical support to GeoLink™ through 2005 in connection with the use of moissanite jewels in its development and commercialization of pervasive mobile ultra-high capacity optical/laser phased array communications data-links. The MOU gives GeoLink™ worldwide exclusive rights for the use of moissanite jewels for GeoLink's application areas, while GeoLink™ has agreed to meet certain minimum annual moissanite purchasing requirements commencing in July 2004. The required minimum purchases through 2005 are not material for Charles & Colvard. The MOU provides for the parties to negotiate a long-term supply agreement during the development phase of the relationship.

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 these same patents in a number of foreign jurisdictions, with certain other jurisdictions still pending. 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.

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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. 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. 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.

Designing Shapes with Proportions Unique to Moissanite Jewels. Maximizing the light reflected 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 castle, square brilliant and baguette shapes. 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. During 2005, we intend to continue to outsource faceting services to our 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. Currently, we have two suppliers of volume faceting services, both of which are located in

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Asia, and we have been satisfied with the capabilities and performance of each of these suppliers. We are currently seeking a third supplier of faceting services and it is our goal to have a third supplier in place during 2005. The majority of our faceting services currently are provided by John M. Bachman, Inc. (JMB), as discussed below. We do not have a long-term agreement in place with our other supplier of volume faceting services.

In 1997, we entered into a multi-year agreement with 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. Our agreement with JMB expires December 31, 2006; 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. The Company presently intends to negotiate an extension of its agreement with JMB. If no extension is agreed upon, management believes that alternative suppliers of faceting services would be available. In April 2002, we purchased from JMB 200 used custom faceting machines for \$60,000, in order to ensure that the machines are available in the event we have increased faceting requirements. JMB has agreed to store and maintain these machines and to repurchase the machines from us if higher faceting levels are required. We anticipate reaching those increased monthly faceting levels during 2005 and expect JMB to begin repurchasing the machines at a price of \$300 per machine.

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. We will require third parties to which we outsource these processes 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 or 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.

Marketing and Distribution

Marketing

Domestic. Beginning late in the first quarter of 2002, we executed a global marketing strategy focusing on advertising to our target consumer in the United States. In mid-fourth quarter 2002, we conducted a two-phase marketing research project aimed at further defining our primary U.S. target market and canvassing the opinions and buying attitudes of women who purchase jewelry. We narrowed our primary market and re-defined it to consist of self-purchasing, women between the ages of 35 and 55, with an annual income of at least US\$45,000 (if married, combined household income of \$75,000). In 2003 and 2004, we focused on consumer print advertising, tagged to specific retailers, in high-end consumer magazines with ads placed in fashion publications with United States and Asian distribution. We expect to continue those consumer fashion ads through 2005.

We believe our marketing and advertising has continued to strengthen the image and reputation of our brand, Charles & Colvard, and our product, moissanite jewels. In late fourth quarter 2002 and throughout 2003 and 2004 our advertising message to the jewelry trade focused on moissanite jewelry being a new product category and the business opportunity (new customer base – the self-purchasing woman, higher

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average retail ticket sales, product differentiation, higher profit margins, and a new source of revenue) it represented to both retailers and manufacturers. We believe that no other gem material occupies the marketing niche called “reward for achievement” jewelry specifically focused on women self-purchasers. Diamond occupies the market of jewelry symbolizing romance and a gift of love. Charles & Colvard will continue focusing its main message as the perfect reward for a woman’s achievement (large or small, personal or professional) to its primary market, the self-purchasing woman.

We continued to support our existing customers and moissanite retailers with marketing collateral, advertising, and public relations efforts. We believe that this marketing and advertising program resulted in a consistent and positive message for moissanite and set the stage for our future public relations and marketing efforts, positioning moissanite as a new product category in the jewelry industry and a unique and desirable jewel for consumers.

In the fourth quarter of 2004 we participated with a major retailer, JCPenney, in supporting the introduction of moissanite jewelry into 462 of its stores. This support consisted of advertising in fashion magazines, local and national newspaper inserts and outdoor billboard advertising. We plan to continue supporting our retailers with outdoor advertising, listing them in our consumer fashion ads, and supplying them with marketing tools to increase their moissanite jewelry sales.

Public relations activities are an important component of our marketing strategy and are integral to supporting the launch of new moissanite retailers. Our key public relations activities in 2004 included the following:

- Generating coverage in fashion, jewelry industry trade, and general national press.
- Developing new stories to be carried on local television news programs and local newspaper markets throughout the U.S.
- Capitalizing on public relations activities that promote both Charles & Colvard as a brand, and moissanite as product, to include but not limited to sponsorships.

Our domestic marketing and public relations goal for 2005 is to create more consumer impressions for Charles & Colvard created moissanite than were achieved in 2004 (without significantly increasing the public relations budget) and thereby increasing the overall public’s and our primary market’s moissanite awareness and desire to purchase. We will focus primarily on public relations programs specifically designed to reach our primary market, the self-purchasing, independent decision-making, woman, between the ages of 35 and 55, with an annual income of at least \$45,000 who takes pride in her achievements, is fashion conscious, influenced by style, and aspires to enrich her lifestyle.

We have also implemented focused advertising using a new consumer lifestyle image advertisement which debuted in 2003 in a mix of fashion publications that included: Elle, InStyle, Marie Claire, Vanity Fair, and Vogue. While the selection of publications chosen may vary in the future, this consumer campaign will continue through the third quarter of 2005. We plan to develop an updated version of our consumer lifestyle campaign and launch it in the fourth quarter of 2005.

In 2005, Charles & Colvard will continue to advertise in jewelry trade publications such as JCK, Modern Jeweler, and National Jeweler. We will continue to promote the message of moissanite being a new product category and its unique business opportunity (new customer base – the self-purchasing woman, higher average retail ticket sales, higher profit margins, and a new source of revenue) to the retailer.

International. Internationally, we work with our distributors to develop advertising and marketing campaigns targeting specific geographic regions, building on the marketing images, strategies, and themes developed in the United States. Pursuant to our international distribution agreements, we provide incentives to our customers to use advertising that supports the brand image for moissanite created by Charles & Colvard. We may provide other advertising and promotion incentives in international markets to increase jewelry trade and consumer awareness.

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Trade Shows. Charles & Colvard will continue to participate in jewelry trade shows as an exhibitor. In 2004, we exhibited in the JCK Phoenix, Manufacturing Jewelers and Suppliers of America (MJSA) Expo in New York, Basel 2004 Worldwide Watch and Jewellery Show in Switzerland, Hong Kong Jewelry Show and JCK Las Vegas. Also in 2004, we participated in the VicenzaOro Show in Italy, and attended the Jewelers of America Shows in New York. In 2005, we plan to exhibit at JCK Phoenix, BaselWorld 2005, the JCK Las Vegas, The Hong Kong Jewellery Shows and certain other international jewelry trade shows.

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 in 1999.

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 two established jewelry distributors, Stuller Settings, Inc. (Stuller) and Rio Grande. Additionally, we have entered into arrangements with several jewelry manufacturers, most notably K&G Creations and Reeves Park, 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, K&G Creations, Reeves Park and other jewelry manufacturers.

Our three largest customers, K&G Creations, Reeves Park and Stuller, accounted for 34%, 24% and 21%, respectively, of our sales during 2004. While we believe our current relationship with these customers is good, and alternate manufacturers and distributors are available to serve their customer base, a loss of these customers could cause a material adverse effect on our results of operations in a particular period. In addition, we have collaborated with our customers to expand distribution with retailers. Through our efforts with Reeves Park, JCPenney is the first national retail chain to carry moissanite jewelry. The Company expects its relationship with Reeves Park (and indirectly with JCPenney) to become more significant in future periods and that the Company will become, at least in the short-term, more dependent on maintaining and enhancing its JCPenney program.

We believe that moissanite jewels provide retailers with an opportunity to earn a profit margin that compares favorably to other jewelry products and allow retailers 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.

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We believe that distributing moissanite jewels through distributors 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 distributors, with which many of them already have relationships. Those jewelers that wish to purchase finished jewelry for sale in their stores may do so either through distributors or any of the jewelry manufacturers working with moissanite.

The quality, design and workmanship of the settings chosen by distributors, manufacturers, designers and retailers affects consumer perception and acceptance of our jewel, and our control over these elements is limited to our pricing and licensing policies. 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.

As our retail customer base has grown and we have gained distribution with prominent regional and national outlets, we believe we are beginning to see the benefit of our distribution model. By combining the manufacturers' strength of jewelry design and program execution with our beautiful jewel, our distribution message is that we can provide a compelling revenue pipeline to retailers. Several manufacturers have successfully introduced moissanite with multi-door chains. In 2002, we supported our partners efforts in expanding and developing distribution with several notable retailers. These include but are not limited to ShopNBC, Shop At Home, Landau, Army Air Force Exchange System (AAFES), and Morgan Jewelers. In 2003, we supported additional traditional retailer test distributions at Kings Jewelers and Carlyle & Company, as well as a number of other retailers.

In 2004 expansion occurred at AAFES, Kings Jewelers and Landau, as well as a number of other retailers. New distribution occurred at Boscov's, Daniel's, Migerobe, Alvin's and our largest new retail chain, 462 stores at JCPenney. JCPenney is the first national retail chain to carry moissanite jewelry. In addition, there were trunk show tests in 10 stores whose jewelry departments are leased to Finlay Enterprises. Finlay operates leased department store jewelry locations in chains such as Robinson-May, Lord & Taylor, and Marshall Fields. In February 2005, we announced that moissanite jewelry will be available at 114 Finlay leased department store jewelry counters by March/April 2005. During 2005, we have also seen expanded distribution into Rhomberg Jewelers, a 23 store chain in Switzerland, 6 of the 40 Taiwan stores of the French based Carrefour retail chain, expanded from 14 to 31 Boscov's department stores, expanded from 12 to all 38 of the Migerobe operated leased jewelry departments within Saks Inc. department stores and increased the number of JCPenney stores offering moissanite jewelry to 703 stores. Additional test distribution programs are being planned in 2005.

We believe that we have developed a testing template that can enable us to gain distribution. Generally, we seek to participate with the retailers in training their sales and marketing personnel in moissanite sales positioning and strategies and in working with them to create focused advertising and promotional efforts to publicize "trunk shows" and other special sales events at the test store locations. In addition, to facilitate new distribution, we have allowed inventory to be taken on a consignment basis. In the cases of Landau and JCPenney the majority of distribution at December 31, 2004 was on a consignment basis. Charles & Colvard recognizes revenue on consignment shipments on the earlier of the sale of the jewelry by the retailer or the retailer or manufacturer agreeing to take ownership of the jewels without recourse.

We believe that our sales on television shopping channels demonstrate that the consumer understands the value and beauty of our jewel. As a result, we have seen increased interest from key traditional jewelry retailers. We believe that we can achieve long-term growth as we introduce this jewel into the traditional jewelry channels of distribution.

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We will also continue to seek other “non-traditional” channels such as catalog, showrooms, mail order, TV shopping channels, Internet, department store, specialty stores and mass retail. The growing consumer acceptance of moissanite will allow Charles & Colvard to expand into these various channels. As we expand, we will manage the issues surrounding the multiple channel distribution method with the need for a consistent brand-building program.

Aggregate domestic sales were equal to approximately \$20.9 million, \$14.5 million, and \$14.0 million in 2004, 2003 and 2002, respectively. We plan to add additional sales professionals in 2005 to focus on new business development and retailer training. The additional personnel will enable us to increase our presence at trade shows and other important sales opportunities.

International. We currently distribute moissanite jewels in substantially all of Western Europe, Australia, India and certain territories in Southeast Asia and the Middle East. We have approximately forty 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 payment terms to our international customers. Export sales aggregated approximately \$3.0 million, \$2.8 million, and \$2.5 million, in 2004, 2003, and 2002, respectively.

Similar to the US, we have begun distributing through TV retailers internationally. Specifically, we have developed partnerships with our manufacturing customers at Ideal World Shopping in the UK, Eastern Home Shopping in Taiwan, Jupiter Shop Channel in Japan, and M6 Boutique in France. We believe that we are positioned for future growth in this distribution channel.

We have also continued our investment in the Asian market. Our Hong Kong office is working on obtaining business relationships that will expand our distribution through Southeast Asia.

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, synthetic, 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. Many 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 than we do.

The worldwide market for large, uncut high-quality diamonds is significantly consolidated through the Diamond Trading Company, a company controlled by DeBeers. This company 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

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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 diamonds are available in the marketplace and may 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 near-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, companies such as the Gemesis Corporation and Apollo Diamonds 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).

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, Norstel AB, Bridgestone, ABB and Northrup Grumman Corporation, for semiconductor uses. We believe that Cree and Norstel AB are currently the only suppliers of SiC crystals in colors, sizes and volumes suitable for gemstone applications, and we believe that the patents owned or pending by Cree and Norstel AB or us provide substantial technological, legal and cost barriers to other companies' development of near-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. 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 marketing program, can 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;

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- 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 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 that, once developed, would allow us to market our products profitably.

Employees

At February 28, 2005, we had 50 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 in the jewelry industry 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 limiting expenditures and motivating our employee base. Periods of rapid growth may place a significant strain on our personnel and other resources. 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 are in the early stages of development which may impact our ability to achieve market acceptance of our products and our ability to produce our products. We are in the early stages of commercializing moissanite jewels, building consumer brand awareness and growing distribution channels for our jewels. The timing of or potential for a significant increase in 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.

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Our future financial performance depends upon continued growth and consumer acceptance of our products. 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 136,000 carats during the year ended December 31, 2004. The degree of future 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 our consumers' 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 sale of our jewels in North America through K&G Creations (a jewelry manufacturer and distributor), Reeves Park (a jewelry manufacturer) and Stuller Settings, Inc. as well as 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 and after, 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, such as K&G Creations and Reeves Park will sufficiently increase sales in North America. We anticipate that the majority of the moissanite jewels that we sell in North America will be distributed through K&G Creations, Reeves Park and Stuller as well as our other manufacturers, and therefore, we are substantially dependent upon these companies for distribution of moissanite jewels in North America. Through our efforts with Reeves Park, JCPenney is the first national retail chain to carry moissanite jewelry. The Company expects its relationship with Reeves Park (and indirectly with JCPenney) to become more significant in future periods and that the Company will become, at least in the short-term, more dependent on maintaining and enhancing its JCPenney program.

A prolonged economic downturn and the uncertainties caused by war or terrorism could adversely affect our operations. Purchases of jewelry, including purchases of our products, may be affected by any prolonged, negative trends in the general economy that adversely affect consumer spending. Any reduction in consumer confidence or disposable income may adversely affect jewelry companies, in general, and our Company, in particular, more significantly than companies that rely less on discretionary

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consumer spending. Further, the affect that war and possible additional terrorist attacks may have on consumers and the economies of the United States, as well as other countries in which our products are sold, is unpredictable and uncertain. Any significant reduction in demand for our products would have a material adverse affect on our results of operations and could, if it continued, have a material adverse affect on our financial condition.

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, Australia, India, and certain territories in Southeast Asia and the Middle East. We currently have a total of approximately 40 international distributors. 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:

- the adverse effects on United States-based companies operating in foreign markets that might result from war, terrorism, changes in diplomatic trade or business relationships or other political, social, religious or economic instability;
- 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. 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 Cree for the supply of a substantial majority of our SiC crystals. We currently depend on a single source, Cree Inc. (Cree), for the supply of a substantial majority of SiC crystals that we use in our business. 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, at least 50%, by dollar volume, of our requirements for SiC material for the production of gemstones in each calendar quarter. In February 2005 we entered into an Exclusive Supply Agreement with Norstel AB, however, Norstel AB has only demonstrated that it can produce suitable raw material in limited quantities and is not expected to produce significant amounts of moissanite at least until after mid-2006 when its new plant which is currently under construction is scheduled to become operational. Therefore, at the present time, we are dependant on Cree for a substantial majority of our principal raw material.

While Cree has improved its production processes and is currently producing SiC crystals sufficient to meet our requirements, we experienced difficulties in the past in obtaining crystals from Cree in the quality, sizes and volumes that we desired. We from time to time enter 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 us with raw materials of sufficient quality, sizes and volumes that we desire nor that we will successfully negotiate purchase commitments that enable us to manage our inventories and raw material costs effectively. In addition, although Norstel AB represents a potential second source of supply, Norstel AB does not presently have the capacity to produce significant quantities of SiC of suitable quality and sizes, and there can be no assurance that Norstel AB will ever develop these capabilities.

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We rely upon our ability to protect our intellectual property. We have United States product and method patents for moissanite jewels under which we believe that we have broad, exclusive rights to manufacture, use and sell moissanite jewels in the United States. We have patents and patent 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. If Norstel AB becomes a significant second source of supply, we will also become dependent on Norstel AB's technology.

There can be no assurance that any patents issued to or licensed by or to us, Cree, or Norstel AB will provide any significant commercial protection, that we, Cree or Norstel AB will have sufficient resources to prosecute our respective patents or that any patents will be upheld by a court should we, or our suppliers seek to enforce our respective rights against an infringer. The existence of valid patents does not prevent other companies from independently developing competing technologies as evidenced by our Agreement with Norstel AB. 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 its type, kind, quality, character, origin or other characteristics. 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 market our products, our business, operating results and financial condition could be materially adversely affected.

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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.

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 impact matters of corporate governance and the rights of shareholders. Certain of these provisions have an anti-takeover effect and may delay or prevent takeover attempts not first approved by 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 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 with Cree 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.

Available Information

Our internet website is www.moissanite.com or www.charlesandcolvard.com. We make available free of charge through our website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission.

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ITEM 2. PROPERTIES

We lease approximately 16,500 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 lease expires in July 2011. This space houses all United States personnel, including our executive offices, sales offices, administrative personnel and production facilities. Our management considers this space to be sufficient for our foreseeable needs over the next 12 months.

We also have five leases associated with our companies in Hong Kong and China. Two of these leases are for general office space and the other three leases are for retail establishments. These leases expire at various dates from February 2005 to February 2008. The lease that expired in February 2005 was for a retail establishment in Hong Kong and was not renewed.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any pending legal proceedings other than ordinary routine litigation incidental to the business.

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 February 28, 2005 there were 235 shareholders of record of our common stock.

	2004		2003	
	High	Low	High	Low
First Quarter	\$ 5.18	\$3.90	\$5.55	\$3.83
Second Quarter	6.25	4.51	4.95	3.05
Third Quarter	8.70	5.37	5.39	3.63
Fourth Quarter	10.77	7.18	6.23	3.87

We have never paid dividends on our capital stock.

Equity Compensation Plan Information

The following table sets forth information as of December 31, 2004 with respect to compensation plans under which our equity securities are authorized for issuance.

Plan Category	(A) Number of Securities To be Issued upon Exercise of Outstanding Options, Warrants and Rights	(B) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	(C) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (A)) (1)
Equity Compensation Plans Approved by Security Holders	1,194,001	\$ 6.04	1,507,710
Equity Compensation Plans Not Approved by Security Holders	—	\$ —	—
Total	1,194,001	\$ 6.04	1,507,710

- (1) The 1997 Omnibus Stock Plan of Charles & Colvard, Ltd. (formerly known as C3, Inc.) includes an “evergreen” or “replenishment” formula which provides that the number of shares authorized for issuance may be increased from time to time to 20% of the authorized and issued shares of Common Stock less the number of shares granted under the 1996 Stock Option Plan of Charles & Colvard Ltd. (formerly known as C3, Inc.) or any other prior stock plan. The shares shown in column (C) may be the subject of awards other than options, warrants or rights under the 1997 Omnibus Stock Plan.

Purchase of Equity Securities

Charles & Colvard did not make any purchases of its common stock during the three months ended December 31, 2004, however, there was an authorized repurchase program and the related activity in this program in 2004 was as follows:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly-Announced Plan	Maximum Number of Shares That May Yet be Purchased Under the Plan (1)
October 1, 2004 – October 31, 2004	—	—	—	853,623
November 1, 2004 – November 30, 2004	—	—	—	853,623
December 1, 2004 – December 31, 2004	—	—	—	853,623
Total for 2004	46,377	\$ 5.07	46,377	

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ITEM 6. SELECTED FINANCIAL DATA

The following selected statement of operations data for the years ended December 31, 2004, 2003, and 2002 and the selected balance sheet data at December 31, 2004 and 2003 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, 2001 and 2000 and the selected balance sheet data at December 31, 2002, 2001 and 2000 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.

	Year Ended December 31,				
	2004	2003	2002	2001	2000
Statements of Operations Data					
Net sales	\$23,917,045	\$17,240,383	\$16,513,515	\$11,505,129	\$12,795,125
Cost of goods sold	8,570,448	6,575,931	6,586,925	5,137,630	5,828,319
Gross profit	15,346,597	10,664,452	9,926,590	6,367,499	6,966,806
Operating expenses:					
Marketing and sales	9,287,549	6,080,829	4,967,215	3,222,743	9,348,272
General and administrative (1)	3,006,647	2,462,404	2,401,087	2,104,180	3,372,083
Research and development	14,076	26,702	7,259	21,977	1,439,526
Other	—	—	(450)	119,460	313,538
Total operating expenses	12,308,272	8,569,935	7,375,111	5,468,360	14,473,419
Operating income (loss)	3,038,325	2,094,517	2,551,479	899,139	(7,506,613)
Interest income	138,223	112,359	199,084	325,596	428,081
Income (loss) before taxes	3,176,548	2,206,876	2,750,563	1,224,735	(7,078,532)
Income tax expense (benefit) (2)	1,564,256	1,163,501	(6,657,874)	—	—
Net income (loss)	\$ 1,612,292	\$ 1,043,375	\$ 9,408,437	\$ 1,224,735	\$ (7,078,532)
Net income (loss) per share					
Basic	\$ 0.12	\$ 0.08	\$ 0.70	\$ 0.10	\$ (0.99)
Diluted	\$ 0.12	\$ 0.08	\$ 0.69	\$ 0.10	\$ (0.99)
Weighted-average common shares					
Basic	13,308,322	13,228,758	13,355,027	12,546,108	7,167,088
Diluted	13,720,172	13,544,616	13,644,177	12,555,630	7,167,088
December 31,					
	2004	2003	2002	2001	2000
Balance Sheet Data					
Cash and equivalents	\$12,873,847	\$11,559,123	\$13,282,245	\$10,236,319	\$ 3,826,402
Working capital	42,116,284	37,745,292	36,236,017	33,444,926	25,937,806
Total assets	50,635,625	46,447,288	45,948,762	35,241,930	29,607,994
Long term debt	—	—	—	—	—
Shareholders’ equity	47,258,397	44,123,957	43,751,551	34,077,776	26,859,784

1. Compensation expense related to the issuance of stock options for 2004, 2003, 2002, 2001, and 2000 was \$70,672, \$34,283, \$92,497, \$37,262, and \$149,368, respectively. See Note 8 of Notes to Financial Statements.
2. The Company recorded a one-time \$6.7 million non-operating and non-cash addition to earnings during 2002, due to the expected realization of deferred income tax assets. See Note 9 of Notes to Financial Statements.

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

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 expense 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 in Item 1 of this report 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) 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. Moissanite is being marketed as a new product category and business opportunity for the jewelry trade.

We began shipping moissanite to domestic retail jewelers and international distributors during the second quarter of 1998. During the second quarter of 2000, we changed our domestic distribution model to sell through jewel distributors and jewelry manufacturers rather than directly 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, including K&G Creations and Reeves Park, which are currently our two largest customers. Through these agreements with distributors and jewelry manufacturers and the brand awareness created by our marketing program, we have sought to rapidly increase the introduction of moissanite into the domestic jewelry market while maintaining average selling prices. Although these distribution and marketing strategies enabled us to achieve profitability in the last four completed fiscal years, 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. To enhance our presence in this market, we established a Charles & Colvard controlled company in China in August 2003.

During 2002, we focused on the domestic market, while investing limited resources in certain international markets that management believes represent the most potential. Our 2002 sales were 44% higher than sales in 2001 with sustained profitability and positive cash flow. In 2003, we increased our sales and marketing expenses to expand product awareness and provide support to retailers, thereby accelerating sales growth. The majority of the increased expenses were focused on the domestic market however we also increased our marketing and sales investment in Hong Kong and China. Our sales were 4% higher in 2003 over 2002. During 2004, we continued our increased investment in sales and marketing expenses to accelerate our growth rate. Our sales in 2004 were 39% higher than 2003 and we remained profitable. We believe that our increased investment in sales and marketing expenses will lead to further revenue growth in 2005 and beyond. Although our goals for 2005 are to continue increasing sales while sustaining profitability, we cannot be sure that either goal will be achieved.

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In a joint effort with our manufacturing customer, Reeves Park of Minneapolis, we launched a Charles & Colvard moissanite jewelry category at 462 JCPenney retail locations on October 4, 2004. JCPenney also offers moissanite jewelry in its catalog and online. The program was supported with extensive advertising and public relations activities, as well as by in-store events and promotions. Initially, the jewelry placed in this distribution was on consignment with the retailer. In March 2005, JCPenney began offering moissanite in 241 additional stores. While the majority of the distribution at JCPenney is through consignment, current distribution consists of a mixture of asset purchase and consignment.

There were several other new retailers introducing moissanite jewelry during the fourth quarter of 2004, including a 10 store test in the 44 store Daniel's Jewelry, a 3 store test in the 16 store Alvin's Jewelry, a 14 store test in the 41 store Boscov's department stores and a 12 store test at the 38 store Migerobe leased department store chain. In addition, there were trunk show tests in 10 stores whose jewelry departments are leased to Finlay Enterprises. Finlay operates leased department store jewelry locations in chains such as Robinson-May, Lord & Taylor, and Marshall Fields. In February 2005, we announced that moissanite jewelry will be available at 114 Finlay leased department store jewelry counters by March/April 2005.

Results of Operations

The following table is intended to illustrate a tabular analysis of certain Consolidated Statement of Operations data as a percentage of sales for all periods presented. A detailed explanation of our results of operations follows this table.

	Year Ended December 31,					
	2004		2003		2002	
Sales	100%	\$23,917,045	100%	\$17,240,383	100%	\$16,513,515
Gross Profit	64%	15,346,597	62%	10,664,452	60%	9,926,590
Marketing & Sales expenses	39%	9,287,549	35%	6,080,829	30%	4,967,215
G&A expenses	13%	3,006,647	14%	2,462,404	15%	2,401,087
Operating Income	13%	3,038,325	12%	2,094,517	15%	2,551,479

Year ended December 31, 2004 compared with Year ended December 31, 2003.

Net sales were \$23,917,045 for the year ended December 31, 2004 compared to \$17,240,383 for the year ended December 31, 2003, an increase of \$6,676,662 or 39%. Shipments of moissanite jewels, excluding consigned jewels, also increased 39% to approximately 136,000 carats from 97,000 carats in 2003. The average selling price per carat was the same in both years as we sold a comparable product mix. Domestic sales accounted for approximately 87% and 84% of sales during 2004 and 2003, respectively.

Domestic net sales and carat shipments increased by 44% and 45%, respectively, for the year ended December 31, 2004 as compared to the year ended December 31, 2003. Increased domestic shipments are due primarily to the launch of moissanite at JCPenney, as well as higher volume of sales to Stuller following their first release of a twenty page moissanite jewelry catalog for retailers. Our three largest customers, K&G Creations, Reeves Park, and Stuller, accounted for 34%, 24%, and 21%, respectively, of our sales during the year ended December 31, 2004. K&G Creations and Reeves Park, domestic manufacturing customers, provide moissanite jewels and jewelry to a customer base that consists primarily of television shopping channels and traditional retail stores. Stuller, the largest supplier to domestic independent jewelers, provides both moissanite jewels and a limited line of moissanite jewelry to its customers. While we believe our current relationship with these customers is good, and alternate manufacturers and distributors are available to serve their customer base, a loss of any of these customers could cause a material adverse effect on our results of operations in a particular period. Based on our

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inventory on consignment with Reeves Park for JCPenney, and planned advertising and promotional support for this program, the Company expects its relationship with Reeves Park (and indirectly JCPenney) to become more significant in future periods and that the Company will become, at least in the short-term, more dependent on maintaining and enhancing its JCPenney program.

International net sales and carat shipments increased by 10% and 9%, respectively, for the year ended December 31, 2004 as compared to the year ended December 31, 2003. The increase resulted primarily from sales increases in Singapore, Dubai, and Korea, resulting from increased promotions in these areas.

Our gross profit margin was 64.2% for the year ended December 31, 2004 compared to 61.9% for the year ended December 31, 2003. The increased gross margin percentage was primarily caused by lower cost inventory items being relieved from inventory under our first-in, first-out accounting policy. Future gross margins will fluctuate based upon our average selling price per carat and the costs being relieved from inventory under our first-in, first-out accounting policy. The costs being relieved from inventory should trend lower over time, with variations quarter to quarter, as we have achieved declining production costs over the past few years.

Marketing and sales expenses were \$9,287,549 for the year ended December 31, 2004 compared to \$6,080,829 for the year ended December 31, 2003, an increase of \$3,206,720 or 53%. As a percentage of sales, these expenses increased to 39% from 35% in 2003. The primary reasons for the increase are \$2,404,000 and \$217,000 of increased advertising expenses at the US and Hong Kong offices, respectively, to promote customer sales opportunities at new and existing retailers. This increase was partially offset by \$275,000 of advertising production costs in 2003, not incurred in 2004, associated with the redesign of our advertising message. We increased our investment in sales and marketing expenses during 2004 in an effort to increase our sales growth and support the new retailers introducing moissanite jewelry. We expect to continue increasing this investment in 2005. While total sales and marketing expenses should increase in 2005, our plan is for these expenses to be comparable to 2004 as a percentage of sales.

General and administrative expenses were \$3,006,647 for the year ended December 31, 2004 compared to \$2,462,404 for the year ended December 31, 2003, an increase of \$544,243 or 22%. Although there was an increase in these expenses, as a percentage of sales these expenses decreased to 13% from 14% in 2003. The increase in expenses is primarily due to \$372,000 of increased professional fees and \$234,000 of increased compensation costs. The primary reason for the increase in compensation costs was \$136,000 of accrued compensation cost in 2004 under our Fiscal Year 2001 Executive Compensation Plan, as amended (the "Executive Compensation Plan"). There were no costs recorded in 2003 under the Executive Compensation Plan as the Company did not meet its 2003 internal sales and profit goals. The net increase in general and administrative expenses was reduced by \$280,000 in non-recurring legal fees incurred in 2003 relating to settled litigation.

Net interest income was \$138,223 for the year ended December 31, 2004 compared to \$112,359 for the year ended December 31, 2003, an increase of \$25,864 or 23%. This increase resulted from a higher interest rate earned on our cash balances.

Our effective income tax rate for the year ended December 31, 2004 was 49% compared to 53% for the year ended December 31, 2003. Our statutory tax rate is 38.5% and consists of the Federal income tax rate of 34% and North Carolina income tax rate of 4.5%, net of the federal benefit. Our effective income tax rate is higher than our statutory rate primarily due to our inability to currently recognize an income tax benefit for our operating losses in Hong Kong and China. We cannot recognize this income tax benefit due to the uncertainty of generating sufficient future taxable income in these countries to offset the existing losses. Our effective income tax rate is lower in 2004 than 2003 primarily due to the benefit of certain research tax credits. After a detailed review of the Company's research activities, the amount of the research credits expected to be realized was increased in 2004.

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Year ended December 31, 2003 compared with Year ended December 31, 2002.

Net sales were \$17,240,383 for the year ended December 31, 2003 compared to \$16,513,515 for the year ended December 31, 2002, an increase of \$726,868 or 4%. Although shipments of moissanite jewels, excluding consigned jewels, decreased by 1% in 2003 to approximately 97,000 carats from 98,000 carats in 2002, sales increased due to a 4% increase in the average selling price per carat. The average selling price per carat increased primarily due to a product mix in which a greater percentage of larger size jewels, which have a higher price per carat, were sold. Domestic sales accounted for approximately 84% of sales in 2003 and 85% in 2002. Domestic carat shipments in 2003 decreased by 1% and international carat shipments increased by 3%.

The decrease in domestic carat shipments during 2003 is due to decreased hours of moissanite sales broadcasting on the television shopping channel ShopNBC. ShopNBC announced, starting in February 2003, their intention to decrease jewelry as a percentage of total sales. Other domestic retail outlets experienced sales growth in the moissanite category. Our two largest customers in 2003, K&G Creations and Stuller, accounted for 44% and 23%, respectively, of our sales during that year. K&G Creations, a domestic manufacturing customer, provides moissanite jewels and jewelry to a large and diversified customer base, including television shopping channels and traditional retail stores. Stuller, the largest supplier to domestic independent jewelers, provides both moissanite jewels and a limited line of moissanite jewelry to its customers.

Increased international sales into Taiwan and Vietnam were partially offset by a sales decrease into England. The increase in Taiwan can be attributed to the successful introduction of moissanite on a television shopping channel and the increase in Vietnam is due to the opening of a moissanite only store in that country. The reduced sales in England were caused by a de-emphasis of moissanite by our English manufacturer.

Our gross profit margin was 61.9% for the year ended December 31, 2003 compared to 60.1% for the year ended December 31, 2002. The gross margin percentage in 2002 was negatively impacted by the establishment of a \$400,000 lower of cost or market reserve. See "Critical Accounting Policies and Estimates" for an explanation of this reserve. Our gross margin percentage for 2002 would have been 62.5% ignoring the effect of this inventory reserve. The gross margin percentage in 2003 was adversely affected by decreased yields of moissanite jewels from SiC crystals during the period being relieved from inventory under our first in, first out accounting policy, partially offset by the 4% increase in the average selling price per carat.

Marketing and sales expenses were \$6,080,829 for the year ended December 31, 2003 compared to \$4,967,215 for the year ended December 31, 2002, an increase of \$1,113,614 or 22%. As a percentage of sales, these expenses increased to 35% from 30% in 2002. The primary reason for the increase was our 2003 advertising campaign designed to support the new jewelry chains that are testing moissanite jewelry and to stimulate moissanite tests by other chains. Our campaign featured a new advertising message and expanded the placement of advertisements in fashion magazines and billboards. We incurred \$326,000 of production costs associated with changing the look and feel of our advertising message. The increased number of advertisement placements resulted in \$518,000 of increased costs over 2002. During 2003, we incurred \$326,000 of increased marketing and sales costs over 2002 associated with the expansion of our offices in Hong Kong and China. The increases discussed above were partially offset by a \$213,000 decrease in our co-op advertising expense. Our co-op advertising program reimburses a portion of our customers' marketing costs based on the amount of their purchases from us. The decrease in this expense during 2003 is due to the reduction in the amount of allowable credit given to one of our major customers.

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General and administrative expenses were \$2,462,404 for the year ended December 31, 2003 compared to \$2,401,087 for the year ended December 31, 2002, an increase of \$61,317 or 3%. Although there was an increase in these expenses, as a percentage of sales these expenses decreased to 14% from 15% in 2002. Increased professional fees of \$400,000 were offset by decreased compensation costs of \$408,000 pertaining to our Executive Compensation Plan. The primary reason for the increase in professional fees was legal fees of approximately \$280,000 in 2003 related to now settled litigation. Our Executive Compensation Plan was effective for 2003, however, no costs were recorded in 2003 as the Company did not meet its 2003 internal sales and profit goals.

Net interest income was \$112,359 for the year ended December 31, 2003 compared to \$199,084 for the year ended December 31, 2002, a decrease of \$86,725 or 44%. This decrease resulted from a lower interest rate earned on our cash balances.

Income tax expense was \$1,163,501 for the year ended December 31, 2003 compared to an income tax benefit of \$6,657,874 for the year ended December 31, 2002, as discussed below. Our effective income tax rate for 2003 was 53%. This rate is higher than our statutory rate of 38.5% due to our inability to deduct currently \$770,000 of non-U.S. operating losses.

As a result of sustained profitability in 2001 and 2002, we recorded a one-time \$6,657,874 non-operating and non-cash addition to earnings in the fourth quarter of 2002 to reflect the expected future income tax benefits from our deferred income tax assets (primarily our net operating loss carryforwards). The benefit is due to the reversal of the deferred income tax valuation allowance that existed in prior periods. We established a valuation allowance in prior periods due to the uncertainty of whether we would generate sufficient taxable income to realize the benefit of our deferred income tax assets. We believe our sustained profitability in 2001 and 2002 was an indication that it became more likely than not that we would fully realize our deferred income tax assets. Recognition of this asset resulted in the recording of income tax expense in each quarter of 2003 and this expense will be recorded in all future profitable periods. However, U.S. federal income tax payments will only resume once the tax net operating loss carryforwards (\$9.0 million at December 31, 2004) have been completely utilized or if alternative minimum taxes are applicable. Pro forma amounts are shown below to compare net income in 2003 and 2002, excluding this one-time gain and as if we had recorded U.S. income tax expense during 2002 utilizing a combined state and federal effective tax rate of 38.5% of U.S. taxable income. Management believes that this pro forma information is useful to investors in comparing results of operations on a U.S. tax equivalent basis.

	Year ended December 31,	
	2003	2002
As reported:		
Income before income tax expense	\$2,206,876	\$ 2,750,563
Income tax expense (benefit)	1,163,501	(6,657,874)
Net income	\$1,043,375	\$ 9,408,437
Net income per diluted share	\$ 0.08	\$ 0.69
		Year ended December 31, 2002
Pro Forma:		
Income before income tax expense		\$ 2,750,563
Income tax expense (38.5% of U.S. taxable income)		1,287,639
Net income		\$ 1,462,924
Net income per diluted share		\$ 0.11

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Liquidity and Capital Resources

At December 31, 2004, we had \$12.9 million of cash and cash equivalents and \$42.1 million of working capital. Cash and inventory account for 75% of our current assets. Our principal sources of liquidity are cash on hand and cash generated by operations. During the year ended December 31, 2004, \$505,234 of cash was provided by operations. The primary reason for the increase in cash from operating activities was pretax income of \$3,176,548 and a \$911,334 increase in accounts payable, partially offset by a \$3,414,959 increase in receivables. The large increase in receivables is due to the high volume of sales in the month of December 2004. Our investing activities for the year ended December 31, 2004 resulted in \$238,407 of cash used for the purchase of furniture and equipment and \$117,913 on patent and license rights costs. There was \$1,165,810 of cash provided by financing activities during 2004. Cash proceeds from the exercise of stock options of \$1,400,744 were partially offset by \$234,934 of funds used to repurchase common stock under our follow-on repurchase program. More details on this program are discussed below.

Income tax payments for the year ended December 31, 2004 were limited to \$67,500 due to the utilization of a portion of the Company's net operating loss ("NOL") carryforwards to offset the taxable income generated during that period by our US operations. As of December 31, 2004, we had a United States NOL carryforward of approximately \$9.0 million, which expires between 2012 and 2020. Federal and state income tax payments will be limited in future periods to primarily alternative minimum tax payments until the NOL has been completely utilized.

Periodically, the Company sells product to customers on "memo" terms. For shipments on "memo" terms, the customer assumes the risk of loss and has an absolute right of return for a specified period. The Company does not recognize revenue on these transactions until the earlier of (1) the customer informing the Company that it will keep the product or (2) the expiration of the memo period. Prior to 2004, these types of sales have not been significant and the Company recorded accounts receivable and deferred gross profit on these transactions at the time of shipment. At December 31, 2003, \$889,000 of our receivables related to sales on "memo" terms and there was \$448,000 of deferred gross profit on the balance sheet. In 2004, the Company experienced a significant increase in "memo" sales and determined that, effective January 1, 2004, product shipped to our customers on "memo" terms that do not meet all of the relevant criteria for recording as a sale would be classified as inventory on consignment on the Company's consolidated balance sheets. The \$3,244,000 of inventory on consignment at December 31, 2004 represents potential revenue of \$10,966,000 and potential gross profit of \$7,722,000. Since "memo" transactions were not material prior to 2004, we have not reclassified our December 31, 2003 balance sheet to conform to the 2004 presentation.

On average, using historical results as a basis, finished jewels are held in inventory up to 36 months prior to being sold. As sales increase, we expect the number of months finished jewels are held in inventory to decrease. Prior to 2001 the build-up in the Company's inventory was a material use of the company's cash flow. Management considered this investment in inventory essential to be able to meet the orders of its expanding customer base and to fulfill the new and expanding requests from our customers for consigned inventory. It is management's opinion that total inventory should decrease slightly over time from current levels due to forecasted sales increases, and that inventory turnover should increase, thereby not requiring a significant use of working capital and providing a source of future cash flow. However, the Company will maintain inventories to support its forecasted increases in demand for its product.

In February 2005, we agreed with Cree on a framework for purchases for 2005. The Company is obligated to purchase a minimum quantity of usable material on a quarterly basis if Cree meets certain minimum quality levels. For each quarter during 2005, the Company has committed to purchase approximately \$2,050,000 of raw material, assuming the quality of material is consistent with that received in 2004.

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In February 2005 we entered into an Exclusive Supply Agreement with Norstel AB (formerly Jesperator AB) for the supply of silicon carbide (SiC) for use in the manufacturing of moissanite jewels. The initial term of the contract is for three years, and involves the supply of material worth a minimum of approximately \$4.0 million over three years.

From time to time since 2001, the Company has repurchased shares through a Common Stock repurchase program approved by the Board of Directors, authorizing management to repurchase shares of Common Stock through open market or privately negotiated transactions at prices at or below prevailing prices. Pursuant to this authority, the Company repurchased 76,000 shares at \$1.00 per share in 2001, 57,800 shares at an average price of \$3.88 in 2002, and 163,300 shares at an average price of \$4.58 per share in 2003.

In December 2003, the Board of Directors authorized a follow-on repurchase program for up to 900,000 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 prices at or below prevailing prices. During the year ended December 31, 2004, there were 46,377 shares repurchased at an average price of \$5.07. This program expired in December 2004. The Board of Directors will determine whether to authorize an additional follow-on repurchase program based on its evaluation of market conditions and other factors.

Based on our cash and cash equivalents and other working capital, management believes that our existing capital resources are adequate to satisfy our capital requirements for at least the next 12 months.

Contractual Obligations and Commercial Commitments

Our contractual obligations consist of our purchase commitments with Cree and Norstel, the operating lease on our building and the operating leases for our companies in Hong Kong and China. Below are the amounts of these commitments in tabular form.

<u>Contractual Obligations</u>	<u>Payments Due by Period</u>				
	<u>Total</u>	<u>2005</u>	<u>2006-2007</u>	<u>2008-2009</u>	<u>2010 & Beyond</u>
Purchase Commitments-Cree	\$8,200,000 ⁽¹⁾	\$8,200,000	\$ —	\$ —	\$ —
Operating Leases	\$1,147,000	\$ 200,000	\$ 377,000	\$315,000	\$255,000
Purchase Commitments-Norstel	\$3,657,000 ⁽²⁾	\$ 214,000	\$3,083,000	\$360,000	\$ —

(1) During 2005, we are committed to purchase approximately \$2,050,000 of raw material each quarter assuming the quality of material is consistent with that received in 2004.

(2) These amounts are the minimum purchase amounts. If Norstel AB has capacity to manufacture additional SiC, our total commitment could reach \$6.7 million contingent on Norstel AB meeting our quality standards.

Net Operating Loss Carryforward

As of December 31, 2004, we had a United States net operating loss (NOL) carryforward of approximately \$9.0 million, which expires between 2012 and 2020. 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 this limitation will not have a material effect on our ability to utilize the NOL carryforward.

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As of December 31, 2004, there was approximately \$2.5 million in NOL carryforwards in Hong Kong. In accordance with the Hong Kong tax code these amounts can be carried forward indefinitely to offset future taxable income in Hong Kong. Due to the uncertainty of generating sufficient future taxable income in Hong Kong to utilize this NOL, we have established a valuation allowance against this deferred income tax asset.

As of December 31, 2004, there was approximately \$236,000 in NOL carryforwards in China. In accordance with the China tax code these amounts can be carried forward 5 years to offset future taxable income in China. Due to the uncertainty of generating sufficient future taxable income in China to utilize this NOL, we have established a valuation allowance against this deferred income tax asset.

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, revenue recognition, accounts receivable reserves, and co-op advertising.

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 in quality 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 manufacturers, traditional retail stores, home shopping channels and catalogs. Consequently, significant amounts of inventories must be maintained at all times. During 2002, we established a lower of cost or market reserve of \$400,000 to allow for a portion of the finished goods inventory to be re-cut. There are certain shapes and sizes of jewels in inventory that can be re-cut to achieve higher quality standards. The reserve is necessary to allow for the carat weight loss during the re-cutting process. To determine this reserve, we estimated the amount of inventory that is anticipated to be re-cut and the amount of weight loss that will occur during the process. Since the establishment of this reserve, we have not yet re-cut any jewels. At December 31, 2004, the reserve remained at \$400,000.

Revenue is generally recognized when products are shipped. Our standard payment terms for all customers are between 30 to 60 days. Some customers are required to prepay prior to shipment. For all jewels shipped title passes upon shipment of the jewels from our facility (i.e., FOB-shipping point). Periodically, the Company sells product to customers on "memo" terms. For shipments on memo terms, the customer assumes the risk of loss and has an absolute right of return for a specified period. Our customers are generally required to make payments on memo shipments within 30 days upon the customer informing the Company that it will keep the product. Accordingly, the Company does not recognize revenue on these memo transactions until the earlier of (1) the customer informing the Company that it will keep the product or (2) the expiration of the right of return period. Prior to 2004, these types of sales have not been significant and the Company recorded accounts receivable and deferred gross profit on these transactions at the time of shipment. At December 31, 2003, there was \$448,000 of deferred gross profit on the balance sheet. In 2004, the Company experienced a significant increase in "memo" sales and determined that, effective January 1, 2004, product shipped to our

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customers on “memo” terms that do not meet all of the relevant criteria for recording as a sale would be classified as inventory on consignment on the Company’s consolidated balance sheets. The \$3,244,000 of inventory on consignment at December 31, 2004 represents potential revenue of \$10,966,000 and potential gross profit of \$7,722,000.

Estimates are used to determine the amount of two reserves against accounts receivable. First, an “Allowance for Doubtful Accounts” is established to reduce accounts receivable to an amount expected to be collected. Based on our collection history, we determine a percentage based on the age of the receivable that we deem collectible. The allowance is then calculated by applying the appropriate percentage to each of our receivables. Any increases or decreases to this allowance are charged or credited to general and administrative expenses. This allowance for doubtful accounts was \$100,000 and \$130,000 at December 31, 2004 and 2003, respectively. The second reserve against accounts receivable is the “Allowance for Returns”. At the time revenue is recognized, we estimate future returns and reduce sales and accounts receivable by this estimated amount. This amount is estimated using the historical return rate for our Company. The allowance for returns was \$220,000 and \$80,000 at December 31, 2004 and 2003, respectively. The large increase in the reserve in 2004 is due to higher fourth quarter sales in 2004 than 2003.

We offer a co-op advertising program to many of our customers that reimburses a portion of their marketing costs based on their net purchases from us. At the end of any given period, we estimate the amount of co-op advertising expense that has not yet been submitted for credit by our customers. These amounts were \$208,000 and \$363,000 at December 31, 2004 and 2003, respectively. We estimate this amount based on our historical experience with each customer, and the related contractual arrangements to provide certain levels of co-op advertising for our customers.

Newly Issued Accounting Pronouncements

In November 2004, Statement of Financial Accounting Standards (“FAS”) No. 151, *Inventory Costs*, was issued. This statement amends the guidance in Accounting Research Bulletin No. 43, Chapter 4, *Inventory Pricing*, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material. FAS 151 requires that those items be recognized as current period charges. In addition, FAS 151 requires the allocation of fixed production overheads to inventory based on the normal capacity of the production facilities. The provisions of this statement are effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company does not expect the adoption of FAS 151 to have an effect on its consolidated financial statements.

In December 2004, FAS No. 123R, *Share Based Payments*, was issued, as a revision to FAS 123, *Accounting for Stock-Based Compensation*. This statement supercedes APB Opinion No. 25, *Accounting for Stock issued to Employees*, and amends FAS 95, *Statement of Cash Flows*. Generally, the approach in Statement 123R is similar to the approach described in Statement 123. However, Statement 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative. FAS 123R also requires the benefits of income tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow as required under FAS 95.

Statement 123R must be adopted no later than the first interim or annual period beginning after June 15, 2005, irrespective of the entity’s fiscal year. The Company expects to adopt Statement 123R on July 1, 2005, the beginning of its third quarter.

As permitted by Statement 123, the Company currently accounts for share-based payments to employees using APB Opinion 25’s intrinsic value method and, as such, generally recognizes no compensation cost

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for employee stock options. Accordingly, the adoption of Statement 123R's fair value method could have a significant impact on our result of operations, although it will have no impact on our overall financial position. The impact of adoption of Statement 123R cannot be predicted at this time because it will depend on levels of share-based payments granted in the future and other factors. However, had the Company adopted Statement 123R in prior periods, the impact of that standard would have approximated the impact of Statement 123 as described in the disclosure of pro forma net income and earnings per share in Note 2 to our consolidated financial statements.

Off-Balance Sheet Arrangements

We have not engaged in any off-balance sheet financing arrangements.

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, 2004, the majority of our cash was in short-term investments classified as cash and equivalents. All of our transactions with international customers and suppliers are denominated in U.S. dollars.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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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.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders 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, 2004 and 2003 and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2004. 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 the financial statements and financial statement schedule based on our audits.

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

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2004 and 2003, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, 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

March 10, 2005

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CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2004	2003	2002
Net sales	\$23,917,045	\$17,240,383	\$16,513,515
Cost of goods sold	8,570,448	6,575,931	6,586,925
Gross profit	15,346,597	10,664,452	9,926,590
Operating expenses:			
Marketing and sales	9,287,549	6,080,829	4,967,215
General and administrative (Note 8)	3,006,647	2,462,404	2,401,087
Research and development	14,076	26,702	7,259
Other expenses (income)	—	—	(450)
Total operating expenses	12,308,272	8,569,935	7,375,111
Operating income	3,038,325	2,094,517	2,551,479
Interest income	138,223	112,359	199,084
Income before taxes	3,176,548	2,206,876	2,750,563
Income tax expense (benefit) (Note 9)	1,564,256	1,163,501	(6,657,874)
Net income	\$ 1,612,292	\$ 1,043,375	\$ 9,408,437
Net Income per share (Note 2)			
Basic	\$ 0.12	\$ 0.08	\$ 0.70
Diluted	\$ 0.12	\$ 0.08	\$ 0.69
Weighted-average common shares (Note 2)			
Basic	13,308,322	13,228,758	13,355,027
Diluted	13,720,172	13,544,616	13,644,177

See notes to consolidated financial statements.

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CONSOLIDATED BALANCE SHEETS

	December 31,	
	2004	2003
Assets		
Current Assets:		
Cash and equivalents	\$ 12,873,847	\$ 11,559,123
Accounts receivable, net of allowance for doubtful accounts of \$100,000 and \$130,000 respectively	7,007,054	3,702,095
Interest receivable	14,798	6,792
Inventory (Note 3)	21,458,879	24,065,992
Inventory on consignment (Note 4)	3,243,797	—
Prepaid expenses and other assets	439,371	499,442
Deferred income taxes (Note 9)	455,766	235,179
Total current assets	45,493,512	40,068,623
Long Term Assets:		
Furniture and equipment, net (Note 5)	524,645	453,836
Patent and license rights, net (Note 5)	348,435	274,890
Deferred income taxes (Note 9)	4,269,033	5,649,939
Total long term assets	5,142,113	6,378,665
Total assets	\$ 50,635,625	\$ 46,447,288
Liabilities and Shareholders' Equity		
Current Liabilities:		
Accounts payable:		
Cree, Inc. (Note 10)	\$ 663,630	\$ 778,516
Other	1,565,163	538,943
Accrued payroll	557,801	164,943
Accrued co-op advertising	208,000	363,000
Accrued expenses and other liabilities	382,634	29,659
Deferred gross profit	—	448,270
Total current liabilities	3,377,228	2,323,331
Commitments (Note 10)		
Shareholders' Equity (Notes 6 and 7)		
Common stock, no par value; 50,000,000 shares authorized; 13,508,556 and 13,214,281 shares issued and outstanding at December 31, 2004 and 2003, respectively	56,495,095	54,333,287
Additional paid-in capital—stock options	1,768,120	2,407,780
Accumulated deficit	(11,004,818)	(12,617,110)
Total shareholders' equity	47,258,397	44,123,957
Total liabilities and shareholders' equity	\$ 50,635,625	\$ 46,447,288

See notes to consolidated financial statements.

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CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Common Stock		Additional Paid-in Capital - Stock Options	Accumulated Deficit	Total Shareholders' Equity
	Number Of Shares	Amount			
Balance at January 1, 2002	13,371,714	\$55,182,692	\$1,964,006	\$(23,068,922)	\$34,077,776
Compensation expense related to stock options	—	—	92,497	—	92,497
Stock options exercised	10,641	13,631	(2,792)	—	10,839
Tax effect of stock options	—	—	386,023	—	386,023
Shares repurchased	(57,800)	(224,021)	—	—	(224,021)
Net Income	—	—	—	9,408,437	9,408,437
Balance at December 31, 2002	13,324,555	54,972,302	2,439,734	(13,660,485)	43,751,551
Compensation expense related to stock options	—	—	34,283	—	34,283
Stock options exercised	53,026	108,988	(6,959)	—	102,029
Tax effect of stock options	—	—	(59,278)	—	(59,278)
Shares repurchased	(163,300)	(748,003)	—	—	(748,003)
Net Income	—	—	—	1,043,375	1,043,375
Balance at December 31, 2003	13,214,281	54,333,287	2,407,780	(12,617,110)	44,123,957
Compensation expense related to stock options	—	—	70,672	—	70,672
Stock options exercised	340,652	2,396,742	(995,998)	—	1,400,744
Tax effect of stock options	—	—	285,666	—	285,666
Shares repurchased	(46,377)	(234,934)	—	—	(234,934)
Net Income	—	—	—	1,612,292	1,612,292
Balance at December 31, 2004	13,508,556	\$56,495,095	\$1,768,120	\$(11,004,818)	\$47,258,397

See notes to consolidated financial statements.

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CHARLES & COLVARD, LTD. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2004	2003	2002
Operating Activities			
Net income	\$ 1,612,292	\$ 1,043,375	\$ 9,408,437
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	197,194	161,899	128,604
Stock option compensation	70,672	34,283	92,497
Loss on disposal of long term assets	14,772	—	—
Change in provision for uncollectible accounts	(30,000)	(10,000)	(135,000)
Change in allowance for returns	140,000	(30,000)	5,000
Deferred income taxes	1,445,985	1,099,501	(6,657,874)
Changes in assets and liabilities:			
Accounts receivable	(3,414,959)	(1,466,143)	737,165
Interest receivable	(8,006)	5,134	1,898
Inventory	(636,684)	(1,700,667)	(1,024,254)
Prepaid expenses and other assets	60,071	(172,263)	(112,430)
Accounts payable	911,334	414,499	343,109
Accrued payroll	392,858	(558,524)	521,455
Accrued expenses and other liabilities	197,975	5,242	114,927
Deferred gross profit	(448,270)	264,903	53,566
Net cash provided by (used in) operating activities	505,234	(908,761)	3,477,100
Investing Activities			
Purchases of furniture and equipment	(238,407)	(144,284)	(215,825)
Patent and license rights costs	(117,913)	(24,103)	(33,252)
Proceeds from sale of long term assets	—	—	31,085
Net cash used in investing activities	(356,320)	(168,387)	(217,992)
Financing Activities			
Stock options exercised	1,400,744	102,029	10,839
Purchase of common stock	(234,934)	(748,003)	(224,021)
Net cash provided by (used in) financing activities	1,165,810	(645,974)	(213,182)
Net change in cash and equivalents	1,314,724	(1,723,122)	3,045,926
Cash and equivalents at beginning of year	11,559,123	13,282,245	10,236,319
Cash and equivalents at end of year	\$12,873,847	\$11,559,123	\$13,282,245
Supplemental Schedule of Cash Flow Data			
Cash paid for income taxes	\$ 67,500	\$ 64,000	\$ —

See notes to consolidated financial statements.

CHARLES & COLVARD, LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002

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. 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 during 1998 and sells worldwide to jewel distributors and jewelry manufacturers.

All of the Company’s activities are within a single business segment. The following tables present certain data by geographic area:

Net Sales (based on destinations of our shipments)	Year Ended December 31,		
	2004	2003	2002
United States	\$20,885,841	\$14,472,898	\$14,033,909
International	3,031,204	2,767,485	2,479,606
Total	\$23,917,045	\$17,240,383	\$16,513,515

Furniture and equipment, net	December 31,	
	2004	2003
United States	\$407,108	\$340,037
International (All in Asia)	117,537	113,799
Total	\$524,645	\$453,836

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, Charles & Colvard (HK), Ltd. These financial statements also include the accounts of a Charles & Colvard controlled company in China. 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 the lower of cost or market determined on a first in, first out basis. Inventory costs include direct material and labor, inbound freight, purchasing and receiving costs, inspection costs and warehousing costs. A significant amount of inventory must be maintained at all times to be prepared to react to possible customer demand for large purchases and for a variety of jewel styles. In addition, the Company has entered into certain agreements to consign inventory for new or expanding retail opportunities. These consignments will require a significant amount of inventory to be maintained. On average, using historical results as a basis, finished jewels are held in inventory up to 36 months prior to being sold.

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The Company currently sells one grade of jewel. The grade is classified as “very good” and consists of near colorless jewels that meet certain standards. Only “very good” jewels are valued in inventory. There is a substantial amount of jewels, including colored jewels that have not met the Company’s quality standards and are not valued in inventory. As market conditions change, including the influences of customer demand, there may be a market for a portion of this unvalued inventory that management may pursue in the future.

Despite the significant amount of jewels in our inventory, obsolescence is not a factor in our inventory valuation. Our jewels do not degrade over time and our inventory generally consists of the cuts and sizes most commonly used in the jewelry industry. All inventories are carefully reviewed for quality standards before they are entered into finished goods. As the quality of our raw material has improved, so have the standards used to evaluate our finished goods. To ensure our inventory meets our current standards, we review the inventory on an ongoing basis. We established a reserve in 2002 to allow for certain jewels of a slightly lesser quality in our finished goods inventory to be re-cut to increase their quality and/or to satisfy certain cuts/sizes demanded by our customers. The need for adjustments to this reserve is evaluated on a period-by-period basis. More details on this reserve are included in Footnote 3.

We have a limited amount of jewelry in our inventory and do not actively market our jewelry inventory. Jewelry inventory value is calculated as the amount we would obtain by melting the gold in the jewelry and putting the jewels back into our loose stone inventory. More details on this reserve are included in Footnote 3.

Furniture and Equipment

Furniture and 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. The range of useful lives for each category of furniture and equipment is as follows:

- Machinery and equipment 5-12 years
- Computer equipment 3-5 years
- Furniture and fixtures 3-10 years
- Leasehold Improvements over the life of our existing operating leases

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. Such costs are amortized over 17 years. The Company also capitalizes licenses it obtains for the use of certain advertising images. Such costs are amortized over the period of the license.

Accounting for Long-Lived Assets

The Company accounts for long-lived assets in accordance with Statement of Financial Accounting Standards (“FAS”) No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. 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 2004, 2003 or 2002.

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.

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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 generally does not require collateral. However, during 2004, the Company did sign a security agreement with a customer giving the company collateral in case of default by the customer on its open balances with the Company. This customer accounted for 62% of the Company's receivables at December 31, 2004 and accounted for 24% of our sales during the year ended December 31, 2004. At December 31, 2004, a second customer accounted for 27% of our receivables. In addition, in 2004 two other customers accounted for approximately 34% and 21% of the Company's sales. During 2003, two customers accounted for approximately 44% and 23% of the Company's sales. At December 31, 2003, these customers accounted for 55% and 6% of receivables, respectively. During 2002, three customers accounted for approximately 42%, 23% and 14% of the Company's sales.

Revenue Recognition

Revenue is generally recognized when products are shipped. At the time revenue is recognized an allowance for estimated returns is established. Any increase or decrease in the allowance for returns is charged against net sales. Our standard payment terms for all customers are between 30 to 60 days. Some customers are required to prepay prior to shipment. For all jewels shipped title passes upon shipment of the jewels from our facility (i.e., FOB-shipping point). Our return policy is that jewels can only be returned for credit within 30 days of shipment and must be returned for a valid reason (quality problems or a shipment of the wrong jewels). Periodically, the Company sells product to customers on "memo" terms. For shipments on memo terms, the customer assumes the risk of loss and has an absolute right of return for a specified period. Our customers are generally required to make payments on memo shipments within 30 days upon the customer informing the Company that it will keep the product. Accordingly, the Company does not recognize revenue on these memo transactions until the earlier of (1) the customer informing the Company that it will keep the product or (2) the expiration of the right of return period. Prior to 2004, these types of sales have not been significant and the Company recorded accounts receivable and deferred gross profit on these transactions at the time of shipment. In 2004, the Company experienced a significant increase in "memo" sales and determined that, effective January 1, 2004, product shipped to our customers on "memo" terms that do not meet all of the relevant criteria for recording as a sale would be classified as inventory on consignment on the Company's consolidated balance sheets. The \$3,244,000 of inventory on consignment at December 31, 2004 represents potential revenue of \$10,966,000 and potential gross profit of \$7,722,000. At December 31, 2004 the remaining lengths of the right of return periods for the related "memo" shipments range from one to twelve months.

Advertising Costs

Advertising production costs are expensed as incurred. Media placement costs are expensed the first time the advertising appears. Advertising expenses for the years ended December 31, 2004, 2003, and 2002 amounted to approximately \$5,700,000, \$3,400,000, and \$2,800,000, respectively.

The Company also offers a co-op advertising program to our customers that reimburse a portion of their marketing costs based on the customers' net purchases from us and is subject to the customer providing documentation of all advertising performed that include the Company's product. For the years ended December 31, 2004, 2003 and 2002, these amounts were \$1,635,000, \$1,341,000, and \$1,554,000, respectively and are included as a component of marketing and sales expenses. These co-op advertising expenses are included in the advertising expense amounts disclosed in the paragraph above.

Marketing and sales

Marketing and Sales expenses are charged to income as incurred. These costs include all expenses of promoting and selling our product and include such items as marketing and sales personnel, advertising, travel, rent, trade shows, market research and sales commissions.

General and administrative

General and administrative expenses are charged to income as incurred. These costs include administrative personnel, legal, investor relations, professional fees, Board of Directors fees, insurance, bad debts and rent.

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Research and Development

All research and development costs are expensed as incurred.

Stock Compensation

The Company measures compensation costs related to employee stock options using the intrinsic value of the equity instrument granted (i.e., the excess of the market price of the stock to be issued over the exercise price of the equity instrument at the date of grant) rather than the fair value of the equity instrument.

In accordance with Accounting Principles Board (APB) Opinion No. 25, and the provision of Statement of Financial Accounting Standards (FAS) No. 123 as applicable to consultants, the Company recorded compensation expense relating to stock options granted with exercise prices less than market value or granted to consultants for the three years ended December 31, 2004 as follows:

	Year Ended December 31,		
	2004	2003	2002
Stock based compensation cost, net of income tax, included in reported net income	\$43,425	\$21,065	\$56,836

This compensation expense is included in general and administrative expenses in the accompanying Statements of Operations. Had compensation expense for all stock options been determined consistent with the provisions of FAS 123, rather than APB 25, the Company's net income and income per share for the three years ended December 31, 2004 would have been recorded to the pro forma amounts indicated below:

	Year Ended December 31,		
	2004	2003	2002
Net income:			
As reported	\$1,612,292	\$1,043,375	\$9,408,437
Deduct – total stock based compensation expense under fair value method for all awards, net of income tax	334,744	693,468	436,766
Pro forma net income	\$1,277,548	\$ 349,907	\$8,971,671
Basic net income per share:			
As reported	\$ 0.12	\$ 0.08	\$ 0.70
Pro forma	0.10	0.03	0.67
Diluted net income per share:			
As reported	\$ 0.12	\$ 0.08	\$ 0.69
Pro forma	0.09	0.03	0.66

The fair value of each option grant is estimated on the grant date using a Black-Scholes option pricing model. The valuations for the three years ended December 31, 2004 were based on the following assumptions:

	Year Ended December 31,		
	2004	2003	2002
Weighted-average grant date fair value	\$ 3.42	\$3.70	\$ 2.99
Weighted-average expected lives (in years)	7.00	7.00	7.00
Risk-free interest rate	3.612%	3.50%	3.425%
Dividend yield	0%	0%	0%
Volatility factor	.912	.975	.985

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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, 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 income tax consequences of “temporary” differences by applying enacted statutory income tax rates applicable to future years to differences between the financial statement carrying amounts and the income tax bases of existing assets and liabilities. Valuation allowances are established when necessary to reduce deferred income tax assets to the amount that is likely to be realized. As of December 31, 2001, the net deferred income tax assets were fully reserved. During 2002, the valuation allowance for US and state income taxes was eliminated as it became more likely than not that the deferred income tax assets would be realized due to the sustained profitability of the Company.

Net Income Per Share

The Company reports its net income per share in accordance with 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 per share computations are based on the weighted-average common shares outstanding. Diluted net income per share computations include the dilutive effect, if any, of stock options and warrants using the treasury stock method.

For the year ended December 31, 2002 warrants to purchase 300,000 shares of common stock at \$18 per share were excluded from the computation of diluted net income per share because the exercise price was greater than the average market price of the common shares. These warrants expired unexercised in November of 2002. In addition, for the years ended December 31, 2004, 2003, and 2002 stock options to purchase approximately 575,000, 850,000, and 950,000 shares, respectively, were also excluded from the computation of diluted net income per share because the options’ exercise price was greater than the average market price of the common shares. During 2004, approximately 1,150,000 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 700,000 treasury shares assumed to be repurchased, was 411,850 shares. During 2003, approximately 810,000 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 470,000 treasury shares assumed to be repurchased, was 315,858 shares. During 2002, approximately 640,000 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 340,000 treasury shares assumed to be repurchased, was 289,150 shares.

Newly Issued Accounting Pronouncements

In November 2004, FAS No. 151, *Inventory Costs*, was issued. This statement amends the guidance in Accounting Research Bulletin No. 43, Chapter 4, *Inventory Pricing*, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material. FAS 151 requires that those items be recognized as current period charges. In addition, FAS 151 requires the allocation of fixed production overheads to inventory based on the normal capacity of the production facilities. The provisions of this statement are effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company does not expect the adoption of FAS 151 to have an effect on its consolidated financial statements.

In December 2004, FAS No. 123R, *Share Based Payments*, was issued, as a revision to FAS 123, *Accounting for Stock-Based Compensation*. This statement supercedes APB Opinion No. 25, *Accounting for Stock issued to Employees*, and amends FAS 95, *Statement of Cash Flows*. Generally, the approach in Statement 123R is similar to the approach described in Statement 123. However, Statement 123R

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requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative. FAS 123R also requires the benefits of income tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow as required under FAS 95.

Statement 123R must be adopted no later than the first interim or annual period beginning after June 15, 2005, irrespective of the entity's fiscal year. The Company expects to adopt Statement 123R on July 1, 2005, the beginning of its third quarter.

As permitted by Statement 123, the Company currently accounts for share-based payments to employees using Opinion 25's intrinsic value method and, as such, generally recognizes no compensation cost for employee stock options. Accordingly, the adoption of Statement 123R's fair value method could have a significant impact on our result of operations, although it will have no impact on our overall financial position. The impact of adoption of Statement 123R cannot be predicted at this time because it will depend on levels of share-based payments granted in the future and other factors. However, had the Company adopted Statement 123R in prior periods, the impact of that standard would have approximated the impact of Statement 123 as described in the disclosure of pro forma net income and earnings per share in Note 2 to our consolidated financial statements.

Reclassification

Certain 2003 and 2002 amounts have been reclassified to conform with the 2004 presentation.

3. Inventories

Inventories consisted of the following:

	December 31,	
	2004	2003
Raw materials	\$ 806,390	\$ 1,133,805
Work-in-process	5,739,004	4,140,703
Finished goods	14,913,485	18,791,484
Total Inventory	\$21,458,879	\$24,065,992

Finished goods are shown net of a reserve for excess jewelry inventory of \$100,000 and \$130,000 at December 31, 2004 and December 31, 2003, respectively. The Company does not actively market its jewelry inventory. Jewelry inventory value is determined as the amount we would obtain by melting the gold in the jewelry and putting the jewels back into loose stone inventory. In addition, finished goods are shown net of a lower of cost or market reserve of \$400,000 at December 31, 2004 and December 31, 2003. This reserve was established to allow for the carat weight loss associated with the re-cutting of a portion of the finished goods inventory. There are certain shapes and sizes of jewels in inventory that will be re-cut to achieve higher quality standards. These jewels can be re-cut into shapes and sizes that have a higher demand without the purchase of additional raw material.

4. Inventory on Consignment

Periodically, the Company sells product to customers on "memo" terms. For shipments on "memo" terms, the customer assumes the risk of loss and has an absolute right of return for a specified period. The Company does not recognize revenue on these transactions until the earlier of (1) the customer informing the Company that it will keep the product or (2) the expiration of the memo period. Prior to 2004, these types of sales have not been significant and the Company recorded accounts receivable and deferred gross profit on these transactions at the time of shipment. In 2004, the Company experienced a significant increase in "memo" sales and determined that, effective January 1, 2004, product shipped to our customers on "memo" terms that do not meet all of the relevant criteria for recording as a sale would be classified as inventory on consignment on the Company's consolidated balance sheets. The \$3,243,797 of inventory on consignment at December 31, 2004 represents potential revenue of \$10,966,000 and potential gross profit of \$7,722,000.

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5. Furniture and Equipment and Patent and License Rights

Furniture and equipment balances are summarized as follows:

	December 31,	
	2004	2003
Machinery and equipment	\$ 353,535	\$ 333,517
Computer equipment	556,879	481,016
Furniture and fixtures	283,498	231,331
Leasehold improvements	92,119	103,073
Construction in progress	9,163	26,611
Total	1,295,194	1,175,548
Accumulated depreciation	(770,549)	(721,712)
Total furniture and equipment, net	\$ 524,645	\$ 453,836

Depreciation expense for 2004, 2003, and 2002 was \$152,826, \$140,395, and \$108,159, respectively.

Patent and license rights balances are summarized as follows:

	December 31,	
	2004	2003
Patent and license rights	\$ 496,930	\$ 379,017
Accumulated amortization	(148,495)	(104,127)
Patent and license rights, net	\$ 348,435	\$ 274,890

Amortization expense for 2004, 2003, and 2002 was \$44,368, \$21,504, and \$20,445, respectively. Amortization expense on our existing patent and license rights is estimated to be \$68,000 for 2005, \$31,000 for 2006, and \$28,000 in 2007 through 2009.

6. Common Stock

In September 2001, the Board of Directors authorized a common stock repurchase program. The program authorized management, in its discretion, to repurchase up to 1,300,000 shares of the Company's common stock through open market or privately negotiated transactions at prices at or below prevailing prices. This program expired in September 2002. During 2001, the Company repurchased 76,000 shares at a cost of \$1 per share from an affiliate of Chester L.F. Paulson. Chester L.F. Paulson was a director of the Company from May 2001 through May 2003. He is no longer a director of the Company. During 2002, the Company repurchased 57,800 shares at an average price of \$3.88.

In October 2002, the Board of Directors authorized a follow-on repurchase program for up to 1,100,000 shares of the Company's common stock. This program expired in September 2003. No shares were repurchased during 2002 under this program. During 2003, the Company repurchased 163,300 shares of common stock at an average cost of \$4.58 per share. Of this amount, 100,000 shares were purchased from an affiliate of Chester L. F. Paulson at an average purchase price of \$4.58 per share.

In December 2003, the Board of Directors authorized a follow-on repurchase program for up to 900,000 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 prices at or below prevailing prices. This program expired in December 2004. During the year ended December 31, 2004, there were 46,377 shares repurchased at an average price of \$5.07.

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7. 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. No shares of preferred stock have been issued as of December 31, 2004.

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.

8. Compensation

Stock Option Plans

In 1996, the Company adopted the 1996 Stock Option Plan of Charles & Colvard, Ltd., (formerly known as 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 Charles & Colvard, Ltd. (formerly known as 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, with the exception of options granted under the Executive Compensation Plan that vest immediately. The Board of Directors has reserved 1,730,912 shares for issuance under the 1997 Omnibus Plan.

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

	1996 Option Plan		1997 Omnibus Plan	
	Number Of Shares	Weighted-Average Exercise Price	Number of Shares	Weighted-Average Exercise Price
2002				
Outstanding at beginning of year	354,432	\$ 4.10	1,017,200	\$ 8.31
Granted	—	—	233,066	3.64
Exercised	—	—	(10,641)	1.02
Canceled	—	—	(16,700)	5.96
Outstanding at end of year	354,432	4.10	1,222,925	7.52
2003				
Granted	—	—	193,115	4.48
Exercised	(13,520)	3.30	(39,506)	1.45
Canceled	(10,650)	4.81	(120,933)	11.24
Outstanding at end of year	330,262	4.11	1,255,601	6.88
2004				
Granted	—	—	144,600	6.07
Exercised	(191,142)	4.21	(149,510)	4.05
Canceled	(26,450)	4.26	(169,360)	12.65
Outstanding at end of year	112,670	\$ 3.92	1,081,331	\$ 6.26

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The following summarizes information about stock options outstanding at December 31, 2004:

Range of Exercise Price	Options Outstanding			Options Exercisable	
	Outstanding as of 12/31/2004	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Exercisable as of 12/31/2004	Weighted-Average Exercise Price
\$0.00-\$1.64	176,968	5.6	\$ 1.2063	176,968	\$ 1.2063
\$1.65-\$3.28	143,992	5.3	\$ 2.5594	138,385	\$ 2.5756
\$3.29-\$4.93	371,507	6.2	\$ 4.3109	326,353	\$ 4.3110
\$4.94-\$6.57	154,434	4.4	\$ 5.2862	80,460	\$ 5.4822
\$6.58-\$8.22	36,900	4.3	\$ 7.9548	34,500	\$ 7.9815
\$8.23-\$9.86	95,100	3.2	\$ 8.6337	49,100	\$ 8.8042
\$9.87-\$11.51	6,800	2.9	\$ 10.8100	6,800	\$ 10.8100
\$13.16-\$14.79	87,300	1.5	\$ 13.8685	75,706	\$ 13.8683
\$14.80-\$16.44	121,000	2.9	\$ 15.0000	26,650	\$ 15.0000
	<u>1,194,001</u>	<u>4.8</u>	<u>\$ 6.0420</u>	<u>914,922</u>	<u>\$ 5.0810</u>

Other

In February 2004, February 2003 and May 2002, the Company amended the 2001 Executive Compensation Plan to remain in effect during 2004, 2003 and 2002. 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 2004, \$210,000 in cash payments were recorded as operating expenses and 115,000 stock options were granted under the plan. For 2003, no payments or stock options were issued under the plan. For 2002, \$450,000 in cash payments were recorded as operating expenses and 124,000 stock options were granted under the plan. No compensation expense was recorded in the accompanying financial statements for the stock options granted under the plan.

9. 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 income tax consequences of "temporary differences" by applying enacted statutory income tax rates applicable to future years to differences between the financial statement carrying amounts and the income tax bases of existing assets and liabilities.

The components of income tax expense are the following.

	Year Ended December 31,		
	2004	2003	2002
Current			
Federal	\$ 102,007	\$ 64,000	\$ —
State	16,264	—	—
	<u>118,271</u>	<u>64,000</u>	<u>—</u>
Deferred			
Federal	1,153,151	891,954	(5,459,457)
State	292,834	207,547	(1,198,417)
	<u>1,445,985</u>	<u>1,099,501</u>	<u>(6,657,874)</u>
	<u>\$1,564,256</u>	<u>\$1,163,501</u>	<u>\$(6,657,874)</u>

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

	December 31,	
	2004	2003
Current		
Reserves and accruals	\$ 289,289	\$ 235,179
Deferred inter-company profit	166,477	—
Total Short-Term	455,766	235,179
Long-Term		
Federal and state loss carryforwards	3,489,000	5,039,000
Hong Kong and China loss carryforwards	513,000	258,000
Benefit of research tax credits	665,000	416,000
Alternative minimum tax credit	137,000	64,000
Stock option compensation	140,000	168,000
Depreciation	(38,786)	(37,061)
Valuation allowance	(636,181)	(258,000)
Total long term	4,269,033	5,649,939
Total deferred income tax assets, net	\$4,724,799	\$5,885,118

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 three years ended December 31, 2004 follows:

	2004	2003	2002
Anticipated income tax expense at the statutory federal rate	\$1,080,000	\$ 750,000	\$ 935,000
State income tax expense, net of federal tax effect	193,000	101,000	125,000
Effect of Foreign operations	131,000	165,000	219,000
Research tax credits	(249,000)	—	—
Other	31,075	18,501	168,126
Increase (decrease) in valuation allowance	378,181	129,000	(8,105,000)
Income tax expense (benefit)	\$1,564,256	\$1,163,501	\$(6,657,874)

After a detailed review of the Company's research activities, the amount of the research credits expected to be realized was increased in 2004. The increase in the valuation allowance during 2004 and 2003 is primarily due to the income tax benefit of losses in Hong Kong and China being fully reserved. Valuation allowances have been established for the income tax benefits of the losses incurred in Hong Kong and China as it is uncertain if sufficient future taxable income will be generated in these countries to offset the existing losses. The increase in the valuation allowance during 2004 is also due to a portion of the research credits claimed in the Company's tax return that are not expected to be realized.

At December 31, 2001, the Company's assessment of the future net realizable value of deferred income tax assets resulted in a valuation allowance. At that point in time, the Company had recorded one profitable year following years of significant losses and it was not clear if sufficient taxable income would be generated to realize the temporary differences and tax credit carryforwards. At December 31, 2002, the valuation allowance was eliminated as it became more likely than not that the deferred income tax assets would be realized due to the sustained profitability of the Company.

At December 31, 2004, the Company has operating and economic loss carryforwards of approximately \$9,050,000 expiring through 2020 for Federal income tax and 2015 for State income tax purposes, 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.

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The Company also has approximately \$2.5 million in NOL carryforwards in Hong Kong. In accordance with the Hong Kong tax code these amounts can be carried forward indefinitely to offset future taxable income in Hong Kong. Due to the uncertainty of generating sufficient future taxable income in Hong Kong to utilize this NOL, we have established a valuation allowance against this deferred income tax asset.

As of December 31, 2004, there was approximately \$236,000 in NOL carryforwards in China. In accordance with the China tax code these amounts can be carried forward 5 years to offset future taxable income in China. Due to the uncertainty of generating sufficient future taxable income in China to utilize this NOL, we have established a valuation allowance against this deferred income tax asset.

10. Commitments

Operating Lease

In March 2004, the Company entered into a seven year lease, beginning in August 2004, for approximately 16,500 square feet of mixed use space from an unaffiliated third party at a base cost of \$11,727 per month, plus additional rentals based on the Company's proportionate share of the lessor's operating costs. Terms of the lease provide for escalations of the base monthly rent throughout the lease term, up to \$13,546 at August 1, 2010. The lease also provides for twelve different months (August 2004-September 2004 and August 2005-May 2006) throughout the term where no rent will be payable and a \$74,000 moving allowance to be paid to the Company. At the Company's discretion, the lease can be extended for three successive five year periods. Finally, the lease provides the Company the right to terminate the lease at the end of five years for \$192,000.

The future minimum lease payments of the Company, including its Hong Kong subsidiary, are as follows: \$200,000 in 2005, \$169,000 in 2006, \$208,000 in 2007, \$158,000 in 2008, \$157,000 in 2009, \$160,000 in 2010 and \$95,000 in 2011, totaling \$1,147,000. Rental expense incurred for operating leases and leases whose terms are less than one year in duration for 2004, 2003, and 2002 was approximately \$290,000, \$238,000, and \$215,000, respectively.

Purchase Commitment

On June 6, 1997, the Company entered into an Amended and Restated Exclusive Supply Agreement ("Exclusive Supply Agreement") with Cree, Inc. ("Cree"). The Exclusive Supply Agreement had 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 met this order threshold and in January 2005 extended the term of the Exclusive Supply Agreement to July 2015. 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, the Company must commit to purchase certain minimum quantities. In February 2005, the Company agreed with Cree on a framework for purchases for 2005. The Company is obligated to purchase a minimum quantity of usable material on a quarterly basis if Cree meets certain minimum quality levels. For each quarter during 2005, the Company has committed to purchase approximately \$2,050,000 of raw material, assuming the quality of material is consistent with that received in 2004.

During 2004, 2003, and 2002, the Company made purchases from Cree of approximately \$6.0 million, \$6.0 million, and \$5.5 million, respectively, for SiC materials.

In February 2005, the Company signed an Exclusive Supply Agreement with Norstel AB (formerly Jesperator AB) for the supply of silicon carbide (SiC) for use in the manufacturing of moissanite jewels. The initial term of the contract is for three years, and involves the supply of material worth a minimum of approximately \$3.7 million. The agreement gives the Company the exclusive right to purchase silicon

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carbide from Norstel for the purpose of fabricating, distributing or selling faceted jewels. Norstel's operations are currently located on the premises of Linköping University in Sweden, where it has focused on the development of SiC ingots, wafers and epitaxy. In addition the Company has advanced \$400,000 towards the purchase of certain equipment. This advance is scheduled to be repaid starting January 2006 through a 35% reduction on the invoice for subsequent purchases of SiC. The minimum purchase commitment during 2005 is relatively small at approximately \$200,000 while Norstel's recently announced silicon carbide plant in Norrköping, Sweden, is being constructed. As the plant becomes operational in 2006 deliveries are scheduled to increase. The agreement provides the Company an option to extend the term of the agreement for a four year period.

11. Selected Quarterly Data (Unaudited)

	Quarters Ended			
	March 31,	June 30,	September 30,	December 31,
Year Ended December 31, 2004				
Net sales	\$5,637,534	\$4,364,276	\$5,197,189	\$8,718,046
Gross profit	3,890,895	2,871,040	3,286,841	5,297,821
Net income	555,357	288,491	303,075	465,369
Basic net income per share (1)	0.04	0.02	0.02	0.03
Diluted net income per share (1)	0.04	0.02	0.02	0.03
Year Ended December 31, 2003				
Net sales	\$4,373,143	\$4,311,706	\$3,776,592	\$4,778,942
Gross profit	2,674,702	2,919,130	2,226,768	2,843,852
Net income	532,451	502,231	4,206	4,487
Basic net income per share	0.04	0.04	0.00	0.00
Diluted net income per share	0.04	0.04	0.00	0.00

(1) The sum of the quarterly numbers do not equal the amount reported on the Statement of Operations due to rounding.

Schedule II
Charles & Colvard, Ltd. And Subsidiary
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	Balance at End of Period
Allowance for Doubtful Accounts					
2004	\$ 130,000	\$ 4,681 ⁽¹⁾	\$ —	\$ 34,681	\$100,000
2003	\$ 140,000	\$ 67,188 ⁽¹⁾	\$ —	\$ 77,188	\$130,000
2002	\$ 275,000	\$ —	\$ 1,611	\$136,611 ⁽²⁾	\$140,000
Reserve for Excess Jewelry Inventory					
2004	\$ 130,000	\$ —	\$ —	\$ 30,000 ⁽³⁾	\$100,000
2003	\$ 230,000	\$ —	\$ —	\$100,000 ⁽³⁾	\$130,000
2002	\$ 635,000	\$ —	\$ —	\$405,000 ⁽³⁾	\$230,000
Allowance for Returns					
2004	\$ 80,000	\$140,000 ⁽⁴⁾	\$ —	\$ —	\$220,000
2003	\$ 110,000	\$ —	\$ —	\$ 30,000 ⁽⁵⁾	\$ 80,000
2002	\$ 105,000	\$ 5,000 ⁽⁴⁾	\$ —	\$ —	\$110,000
Lower of Cost or Market Inventory Reserve					
2004	\$ 400,000	\$ —	\$ —	\$ —	\$400,000
2003	\$ 400,000	\$ —	\$ —	\$ —	\$400,000
2002	\$ —	\$400,000 ⁽⁶⁾	\$ —	\$ —	\$400,000

- (1) Charged against General and Administrative expenses.
- (2) During 2002, there was \$71,611 of accounts written off as uncollectible and a \$65,000 decrease to the allowance to reflect the estimated collectibility of receivables.
- (3) Adjustments to reserve to reflect effect of sales of jewelry during the period.
- (4) Charged against sales.
- (5) Adjustments to allowance; credit to sales.
- (6) Charged against Cost of Goods Sold.

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

None.

Item 9A. Controls and Procedures

(a) Evaluation of disclosure controls and procedures

As of December 31, 2004, the Company's Chief Executive Officer and the Chief Financial Officer evaluated the effectiveness of the Company's disclosure controls and procedures in accordance with Rule 13a-15 under the Exchange Act. Based on their evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the Company's disclosure controls and procedures enable the Company to record, summarize and report in a timely manner the information that the Company is required to disclose in its Exchange Act reports.

(b) Changes in internal control over financial reporting

There were no changes in the Company's internal control over financial reporting that occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

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

Item 14. Auditor Fees

The information called for in items 10 through 14 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 2004.

Part IV

Item 15. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a) (1) and (2) Financial statements and financial statement schedule—the financial statements, financial statement 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 30 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	Restated Articles of Incorporation of Charles & Colvard, Ltd. ++
3.2	Amended and Restated Bylaws of C3, Inc., which hereby is incorporated by reference to Exhibit 3.2 to the Registration Statement on Form S-1 of C3, Inc. (File No. 333-36809)
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 on Form 10-K of C3, Inc. for the fiscal year ended December 31, 1998.
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).+

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- 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 Form 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 10-K 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 10-K 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 10-K 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. *

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- 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 10-K 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 10-K 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 10-K 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 10-Q 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 10-K 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 10-K 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 10-Q 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 10-Q 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 10-Q 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 10-Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2001. *

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- 10.50 Letter Agreement dated March 8, 2002 between Cree, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.50 to the Annual Report on Form 10-K of Charles & Colvard, Ltd. for the year ended December 31, 2001.*
- 10.51 Letter Agreement dated April 2, 2002 between JewelNet Corporation d/b/a K&G Creations and Charles & Colvard, Ltd. which is hereby incorporated by reference to Exhibit 10.51 to Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended March 31, 2002.*
- 10.52 Sixth Amendment to Agreement, dated April 9, 2002 between John M. Bachman, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.52 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended March 31, 2002.*
- 10.53 Executive Compensation Plan for Fiscal Year 2001 as Amended on May 20, 2002, which is hereby incorporated by reference to Exhibit 10.53 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2002.+
- 10.54 Letter Agreement dated August 5, 2002 between Cree, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.50 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2002.*
- 10.55 Salary Continuation Agreement, dated July 15, 2002 between Barbara L. Mooty, Vice President of Brand Identity and Industry Relations, and Charles & Colvard, Ltd. which is hereby incorporated by reference to Exhibit 10.51 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2002.+
- 10.56 Salary Continuation Agreement dated October 1, 2002 between Dennis Reed, Vice President of Sales, and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.56 to the Annual Report on Form 10-K of Charles & Colvard for the year ended December 31, 2002. +
- 10.57 Executive Compensation Plan for Fiscal Year 2001, as Amended on February 13, 2003., which is hereby incorporated by reference to Exhibit 10.57 to the Annual Report on Form 10-K of Charles & Colvard for the year ended December 31, 2002. +
- 10.58 Amendment to Severance and Consulting Agreement dated as of May 31, 2003 between Charles & Colvard, Ltd. and Jeff N. Hunter, filed together with the Severance and Consulting Agreement dated as of May 15, 2000 between Charles & Colvard, Ltd. and Jeff N. Hunter, which is hereby incorporated by reference to Exhibit 10.58 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2003.+
- 10.59 Executive Compensation Plan for Fiscal Year 2001, as amended on February 16, 2004, which is hereby incorporated by reference to Exhibit 10.59 to the Annual Report on Form 10-K of Charles & Colvard for the year ended December 31, 2003. +
- 10.60 Letter Agreement, dated December 18, 2003, between Stuller, Inc. and Charles & Colvard, Ltd, which is hereby incorporated by reference to Exhibit 10.60 to the Annual Report on Form 10-K of Charles & Colvard for the year ended December 31, 2003. *
- 10.61 Letter Agreement, dated December 14, 2003, between Cree, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.61 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended March 31, 2004.*

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- 10.62 Lease Agreement, dated March 26, 2004, between Duke Realty Limited Partnership and Charles & Colvard, Ltd, which is hereby incorporated by reference to Exhibit 10.62 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended March 31, 2004.
- 10.63 Employment Agreement, dated August 1, 2004, between Dennis Reed, Vice President of Sales and Charles & Colvard, which is hereby incorporated by reference to Exhibit 10.63 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended June 30, 2004.+
- 10.64 Manufacturing Agreement, dated August 12, 2004, between Reeves Park, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.64 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2004.
- 10.65 Security Agreement, dated August 15, 2004, between Reeves Park, Inc. and Charles & Colvard, Ltd, which is hereby incorporated by reference to Exhibit 10.65 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2004.
- 10.66 Consignment Agreement, dated August 16, 2004, between Reeves Park, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.66 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2004.*
- 10.67 Amendment to Manufacturing Agreement, dated November 8, 2004, between Reeves Park and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.67 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2004.
- 10.68 First Amendment to Security Agreement, dated November 8, 2004, between Reeves Park and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.68 to the Quarterly Report on Form 10-Q of Charles & Colvard, Ltd. for the quarter ended September 30, 2004.
- 10.69 Notice of Extension of Amended and Restated Exclusive Supply Agreement, dated January 6, 2005, from Charles & Colvard to Cree, Inc., which is hereby incorporated by reference to Exhibit 10.69 on Form 8-K, filed with the SEC on January 7, 2005.
- 10.70 Letter Agreement, dated January 20, 2005, between Stuller, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.70 on Form 8-K, filed with the SEC on January 24, 2005.*
- 10.70.1 Letter Agreement, dated February 9, 2005, between Cree, Inc. and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.71 on Form 8-K, filed with the SEC on February 11, 2005.*
- 10.72 Exclusive Supply Agreement, dated February 14, 2005, between Norstel AB (formerly Jesperator AB) and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.72 on Form 8-K, filed with the SEC on February 17, 2005.*
- 10.73 Letter Agreement, executed February 21, 2005 and dated as of February 9, 2005, between the Bell Group d/b/a Rio Grande and Charles & Colvard, Ltd., which is hereby incorporated by reference to Exhibit 10.73 on Form 8-K, filed with the SEC on February 23, 2005.*
- 10.74 Seventh Amendment to Agreement, dated March 7, 2005 between John M. Bachman, Inc. and Charles & Colvard, Ltd. which is hereby incorporated by reference to Exhibit 10.74 on Form 8-K/A, filed with the SEC on March 10, 2005.*

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10.75	1997 Omnibus Stock Plan of Charles & Colvard, Ltd. as Amended and Restated through March 9, 2005, which is hereby incorporated by reference to Exhibit 10.75 on Form 8-K, filed with the SEC on March 15, 2005.
10.76	Form of Employee Incentive Stock Option Agreement, which is hereby incorporated by reference to Exhibit 10.76 on Form 8-K filed with the SEC on March 15, 2005.
10.77	Form of Director Nonqualified Stock Option Agreement, which is hereby incorporated by reference to Exhibit 10.77 on Form 8-K filed with the SEC on March 15, 2005.
10.78	Form of Employee Nonqualified Stock Option Agreement, which is hereby incorporated by reference to Exhibit 10.78 on Form 8-K filed with the SEC on March 15, 2005.
10.79	Form of Independent Contractor Nonqualified Stock Option Agreement, which is hereby incorporated by reference to Exhibit 10.79 on Form 8-K filed with the SEC on March 15, 2005.
10.80	Form of Restricted Stock Award Agreement, which is hereby incorporated by reference to Exhibit 10.80 on Form 8-K filed with the SEC on March 15, 2005.
14.1	Code of Business Conduct and Ethics, which is hereby incorporated by reference to Exhibit 14.1 to the Annual Report on Form 10-K of Charles & Colvard for the year ended December 31, 2003.
14.2	Code of Ethics for Senior Financial Officers, which is hereby incorporated by reference to Exhibit 14.2 to the Annual Report on Form 10-K of Charles & Colvard for the year ended December 31, 2003.
21.1	Schedules of Subsidiaries
23.1	Consent of Deloitte & Touche LLP
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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

+ Denotes a management contract or compensatory plan or arrangement.

++ Denotes filed herewith

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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: 3/17/05

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: 3/17/05

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

By: /s/ James R. Braun _____ Date: 3/17/05

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

By: /s/ Lisa A. Gavales _____ Date: 3/12/05

Lisa A. Gavales
Director

By: /s/ Laura C. Kendall _____ Date: 3/10/05

Laura C. Kendall
Director

By: /s/ Walter J. O'Brien _____ Date: 3/10/05

Walter J. O'Brien
Director

By: /s/ Frederick A. Russ _____ Date: 3/10/05

Frederick A. Russ
Director

By: /s/ Geraldine L. Sedlar _____ Date: 3/9/05

Geraldine L. Sedlar
Director

By: /s/ George A. Thornton, III _____ Date: 3/8/05

George A. Thornton, III
Director

RESTATED
ARTICLES OF INCORPORATION

Pursuant to Section 55-10-07 of the General Statutes of North Carolina, Charles & Colvard, Ltd. hereby submits the following for the purpose of restating its articles of incorporation.

I.

The name of the corporation is Charles & Colvard, Ltd. (the "Corporation").

II.

The Corporation is authorized to issue two (2) classes of capital stock to be designated, respectively, Common Stock ("Common Stock") and Preferred Stock ("Preferred Stock"). The total number of shares of capital stock that the Corporation is authorized to issue is sixty million (60,000,000). The total number of shares of Common Stock the Corporation shall have authority to issue is fifty million (50,000,000), and the total number of shares of Preferred Stock the Corporation shall have authority to issue is ten million (10,000,000). The Common Stock shall have no par value per share, and the Preferred Stock shall have no par value per share.

A. Common Stock. All shares of Common Stock will be identical and will entitle holders thereof to the same preferences, limitations and relative rights set forth below.

(1) Voting Rights. Each outstanding share of Common Stock shall be entitled to vote on each matter on which the shareholders of the Corporation shall be entitled to vote, and each holder of Common Stock shall be entitled to one vote for each share of such Common Stock held by such holder.

(2) Dividends. The Board of Directors of the Corporation may cause dividends to be paid to holders of Common Stock ratably on a per share basis out of funds legally available for the payment of dividends.

(3) Liquidation. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of the Common Stock shall be entitled, after payment or provision for payment of the debts and other liabilities of the Corporation and the payment of any preferences for the Preferred Stock to receive on a per share basis the remaining assets of the Corporation.

B. Preferred Stock. The Preferred Stock shall be divided into series. The first series shall consist of 105,000 shares and is designated as 1996 Series A Preferred Stock (the "1996 Series A Stock") with the preferences, limitations and relative rights set forth below. The second series shall consist of 682,500 shares and is designated as 1997 Series B Preferred Stock (the "1997 Series B Stock") with the preferences, limitations and relative rights set forth below. The remaining shares of Preferred Stock may be issued from time to time in one or more series, and with such preferences, limitations and relative rights as the Board of the Corporation (the "Board") may determine, all of which shall be stated and expressed in one or more amendment(s) to the Corporation's Articles of Incorporation adopted by the Board providing for the issue of such series as permitted by the North Carolina Business Corporation Act.

C. 1996 Series A Stock. The preferences, limitations and relative rights of the 1996 Series A Stock are as set forth below.

-
- (a) Voting Rights. Except as otherwise required under North Carolina law, the holders of 1996 Series A Stock shall not be entitled to vote. In any matter in which the holders of 1996 Series A Stock shall be entitled to vote pursuant to applicable law, each holder shall be entitled to one vote for each share of 1996 Series A Stock held by such holder.
- (b) Dividends. The Board shall cause dividends to be declared and paid to holders of 1996 Series A Stock as, when and if declared on the Common Stock. Each share of 1996 Series A Stock shall be entitled to receive dividends equal to the cash, property or other item of value that would have been such payable upon such share if that share of 1996 Series A Stock had been converted into shares of Common Stock immediately prior to the declaration of such dividend on the Common Stock.
- (c) Conversion.
- (i) Optional Conversion. Each share of 1996 Series A Stock shall be convertible into one share of Common Stock (the “Series A Conversion Ratio”), at the option of the holder thereof, at any time after the earlier of (i) July 31, 1998 or (ii) the date on which the Corporation closes the sale of Common Stock in an offering registered under the Securities Act of 1933, as amended, with net proceeds to the Corporation and/or any selling shareholders of at least \$8.0 million (after deductions for underwriters’ discounts and expenses relating to the issuance, including without limitation fees of the Corporation’s counsel). The Series A Conversion Ratio shall be adjusted as hereinafter provided.
- (ii) Automatic Conversion. Each share of 1996 Series A Stock shall automatically be converted into shares of Common Stock at the then effective Series A Conversion Ratio immediately upon, and contemporaneously with, the earlier of (A) the effective time of any merger of the Corporation with any other entity, any share exchange of the Common Stock effected with any other entity or any sale of all or substantially all the assets of the Corporation or (B) the date on which the Corporation closes the sale of Common Stock in an offering registered under the Securities Act of 1933, as amended, with net proceeds to the Corporation and/or any selling shareholders of at least \$12.0 million (after deductions for underwriters’ discounts and expenses relating to the issuance, including without limitation, fees of the Corporation’s counsel).
- (iii) Mechanics of Conversion. In order to convert shares of 1996 Series A Stock into shares of Common Stock other than pursuant to clause (ii) above, the holder thereof shall surrender the certificate or certificates therefor, duly endorsed, at the principal office of the Corporation or of any transfer agent for such stock, and shall give written notice to the Corporation at such office that he elects to convert the same and shall state therein the name or names in which he wishes the certificate or certificates representing shares of Common Stock to be issued. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of 1996 Series A Stock a certificate or certificates for the number of shares of Common Stock to

which he shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of surrender of the shares of 1996 Series A Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date.

(iv) Adjustments to Conversion Ratio for Stock Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time after the date on which shares of 1996 Series A Stock are first issued shall declare or pay, without consideration, any right to acquire Common Stock for no consideration (other than pursuant to a stock or other dividend for which a dividend is payable to the holders of 1996 Series A Stock pursuant to subparagraph C(b) above), or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or in any way other than by payment of a dividend in Common Stock), or in the event the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Series A Conversion Ratio in effect immediately prior to such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

(v) Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the 1996 Series A Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by reclassification of stock or otherwise (other than a subdivision or combination of shares provided for in subparagraph (iv) above), the Series A Conversion Ratio then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the 1996 Series A Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, that number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the 1996 Series A Stock immediately before that change.

(vi) No Impairment. The Corporation will not, by amendment of its Articles of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the 1996 Series A Stock but will at all times in good faith assist in the carrying out of all the provisions of this section and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the holders of the 1996 Series A Stock against impairment.

(vii) Certificates as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series A Conversion Ratio, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and

furnish to each holder of 1996 Series A Stock a certificate executed by the Corporation's President or Chief Financial Officer setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of 1996 Series A Stock, furnish or cause to be furnished to such holder a like certificate setting forth (A) such adjustments and readjustments, (B) the Series A Conversion Ratio at the time in effect, and (C) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of the 1996 Series A Stock.

(viii) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of 1996 Series A Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the 1996 Series A Stock.

(ix) Fractional Shares. No fractional share shall be issued upon the conversion of any share or shares of 1996 Series A Stock. If the conversion would result in the issuance of a fraction of a share of Common Stock, the Corporation shall, in lieu of issuing any fractional share, pay the holder otherwise entitled to such fraction a sum of cash equal to the fair market value of such fraction on the date of conversion as determined in good faith by the Board.

- (d) Redemption Rights of the Corporation. At the option of the Board, the Corporation may, at any time at which the 1996 Series A Stock is convertible into Common Stock, redeem from any source of funds legally available therefor, all or any portion of the outstanding shares of 1996 Series A Stock, at a redemption price per share equal to \$5.75 (the "Series A Redemption Price") plus all declared and unpaid dividends thereon, by giving written notice to each holder of record of 1996 Series A Stock to be redeemed (a "Series A Redemption Notice") at its post office address last shown on the records of the Corporation, not later than 30 days prior to the date fixed for any redemption (a "Series A Redemption Date") specifying the number of shares of 1996 Series A Stock that are to be redeemed on the Series A Redemption Date specified in such Series A Redemption Notice. On such Series A Redemption Date, the Corporation will pay to each holder of 1996 Series A Stock, upon surrender for cancellation to the Corporation at its principal office of the certificates, duly endorsed in blank, representing the shares of 1996 Series A Stock to be redeemed on such Series A Redemption Date, an amount per share equal to the Series A Redemption Price thereof plus all declared but unpaid dividends thereon. If less than all of the shares represented by any such certificate are redeemed, the shares to be redeemed shall be selected from the then outstanding shares on a pro rata basis and a new certificate shall be issued representing the unredeemed shares. Until the Series A Redemption Date, holders of the 1996 Series A Stock shall be entitled to the full preferences, limitations and relative rights of such stock. The holders of such shares of 1996 Series A Stock shall cease to have any further rights, other than the right

to receive the Series A Redemption Price thereof plus such declared and unpaid dividends, with respect to the 1996 Series A Stock on the Series A Redemption Date.

- (e) **Liquidation Rights.** In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, the holders of shares of 1996 Series A Stock then outstanding shall be entitled to be paid, in cash, out of the assets of the Corporation available for distribution to its stockholders, before any payment or declaration and setting apart for payment of any amount shall be made in respect of any shares of Common Stock or any other shares of the Corporation junior or subordinate to the 1996 Series A Stock, (i) \$3.00 per share, together with all declared and unpaid dividends on the 1996 Series A Stock, plus (ii) an amount equal to the Corporation's net assets remaining after the payment of the amount described in clause (i) above, multiplied by the percentage of the Common Stock that would be owned by holders of the 1996 Series A Stock if converted on the date of such payment into Common Stock, such amount to be distributed among the holders of the 1996 Series A Stock on a pro rata basis. If, upon any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, the assets to be distributed among the holders of shares of 1996 Series A Stock are insufficient to permit the payment to such holders of the entire preferential amount provided for in clause (i) above, then all of the net assets of the Corporation shall be distributed pro rata among the holders of shares of 1996 Series A Stock.
- (f) **No Reissuance of Stock.** No 1996 Series A Stock acquired by the Corporation by reason of redemption, purchase, or otherwise shall be reissued, and all such shares shall be canceled, retired and eliminated from the 1996 Series A Stock and shall return to the status of Preferred Stock authorized without designation.

D. 1997 Series B Stock. The preferences, limitations and relative rights of the 1997 Series B Stock are as set forth below.

- (a) **Voting Rights.** Except as otherwise required under North Carolina law, the holders of 1997 Series B Stock shall not be entitled to vote. In any matter in which the holders of 1997 Series B Stock shall be entitled to vote pursuant to applicable law, each holder shall be entitled to one vote for each share of 1997 Series B Stock held by such holder.
- (b) **Dividends.** The Board shall cause dividends to be declared and paid to holders of 1997 Series B Stock as, when and if declared on the Common Stock. Each share of 1997 Series B Stock shall be entitled to receive dividends equal to the cash, property or other item of value that would have been payable upon such share if that share of 1997 Series B Stock had been converted into shares of Common Stock immediately prior to the declaration of such dividend on the Common Stock.

(c) Conversion.

(i) Optional Conversion. Each share of 1997 Series B Stock shall be convertible into one share of Common Stock (the “Series B Conversion Ratio”), at the option of the holder thereof, at any time after the earlier of (i) January 1, 1999 or (ii) the date on which the Corporation closes the sale of Common Stock in an offering registered under the Securities Act of 1933, as amended, with net proceeds to the Corporation and/or any selling shareholders of at least \$8.0 million (after deductions for underwriters’ discounts and expenses relating to the issuance, including without limitation, fees of the Corporation’s counsel). The Series B Conversion Ratio shall be adjusted as hereinafter provided.

(ii) Automatic Conversion. Each share of 1997 Series B Stock shall automatically be converted into shares of Common Stock at the then effective Series B Conversion Ratio immediately upon, and contemporaneously with, the earlier of (A) the effective time of any merger of the Corporation with any other entity, any share exchange of the Common Stock effected with any other entity or any sale of all or substantially all the assets of the Corporation, or (B) the date on which the Corporation closes the sale of Common Stock in an offering registered under the Securities Act of 1933, as amended, with net proceeds to the Corporation and/or any selling shareholders of at least \$12.0 million (after deductions for underwriters’ discounts and expenses relating to the issuance, including without limitation, fees of the Corporation’s counsel).

(iii) Mechanics of Conversion. In order to convert shares of 1997 Series B Stock into shares of Common Stock other than pursuant to (ii) above, the holder thereof shall surrender the certificate or certificates therefor, duly endorsed, at the principal office of the Corporation or of any transfer agent for such stock, and shall give written notice to the Corporation at such office that he elects to convert the same and shall state therein the name or names in which he wishes the certificate or certificates representing shares of Common Stock to be issued. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of 1997 Series B Stock a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of surrender of the shares of 1997 Series B Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date.

(iv) Adjustments to Conversion Ratio for Stock Combinations or Subdivisions of Common Stock. If the Corporation at any time or from time to time after the date on which shares of 1997 Series B Stock are first issued shall declare or pay, without consideration, any right to acquire Common Stock for no consideration (other than pursuant to a stock or other dividend for which a dividend is payable to the holders of 1997 Series B Stock pursuant to subparagraph D(b) above), or shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or in any way other than by payment of a dividend in

Common Stock), or in the event the outstanding shares of Common Stock shall be combined or consolidated, by reclassification or otherwise, into a lesser number of shares of Common Stock, then the Series B Conversion Ratio in effect immediately prior to such event shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate.

(v) Adjustments for Reclassification and Reorganization. If the Common Stock issuable upon conversion of the 1997 Series B Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by reclassification of stock or otherwise (other than a subdivision or combination of shares provided for in subparagraph (iv) above), the Series B Conversion Ratio then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted so that the 1997 Series B Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, that number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the 1997 Series B Stock immediately before that change.

(vi) Further Adjustment to the Number of Shares of Common Stock Issuable Upon Conversion.

(A) Adjustment to the Conversion Price - If and whenever after the date hereof the Corporation shall issue or sell any shares of its Common Stock for a consideration per share less than the conversion price in effect immediately prior to the time of such issue or sale (the "Conversion Price"; the initial Conversion Price shall be \$7.35) or the Market Price (as defined below) at the time of such issue or sale, then, forthwith upon such issue or sale, the Conversion Price with respect to the 1997 Series B Stock subsequent to such event shall be reduced (but not increased, except as otherwise specifically provided in subclause (D) below) to the lower of the prices (calculated to the nearest cent) determined as follows: (1) by dividing (i) an amount equal to the sum of (A) the aggregate number of shares of Common Stock outstanding immediately prior to such issue or sale multiplied by the then existing Conversion Price, and (B) the consideration, if any, received by the Corporation upon such issue or sale, by (ii) the aggregate number of shares of Common Stock of all classes outstanding immediately after such issue or sale; or (2) by multiplying the Conversion Price in effect immediately prior to the time of such issue or sale by a fraction, the numerator of which shall be the sum of (i) the aggregate number of shares of Common Stock outstanding immediately prior to such issue or sale multiplied by the Market Price immediately prior to such issue or sale plus (ii) the consideration received by the Corporation upon such issue or sale, and the denominator of which shall be the product of (iii) the aggregate number of shares of Common Stock of all classes outstanding immediately after such issue or sale, multiplied by (iv) the Market Price immediately prior to such issue or sale. No adjustment of the Conversion Price, however, shall be made in an amount of less than 1% of the Conversion Price, but any such lesser adjustment shall be

carried forward and shall be made at the time of and together with the next subsequent adjustment. "Market Price" shall mean, for any day, the average of the final sale prices of the Common Stock on all exchanges on which the Common Stock may at the time be listed or the final bid prices on the NASDAQ National Market System or NASDAQ over-the-counter market, in each such case, unless otherwise provided herein, averaged over a period of forty-five consecutive trading days ending 2 days prior to the day as of which "Market Price" is being determined; provided, however, that in connection with a firm underwriting of a public offering of Common Stock, Market Price shall mean the initial public offering price in such underwritten offering. If at any time the Common Stock is not listed on any such exchange or quoted in any such domestic over-the-counter market, the "Market Price" shall be deemed to be the fair market value thereof as determined by an investment banks firm mutually acceptable to the Company and the holders of at least a majority of the outstanding 1997 Series B Preferred Stock then outstanding; provided, however, that the appointment of an investment banking firm shall be unnecessary if the Board of Directors unanimously agrees on the Market Price. Upon any adjustment in the Conversion Price, the then Series B Conversion Ratio in effect immediately prior to such event shall, concurrently with the effectiveness of the event giving rise to such adjustment, be proportionately decreased or increased, as appropriate.

(B) Issuance of Rights or Options - In case at any time after the date hereof the Corporation shall in any manner grant (whether directly or by assumption in a merger or otherwise), any rights to subscribe for or to purchase, or any options for the purchase of, Common Stock or any stock or securities convertible into or exchangeable for Common Stock (such convertible or exchangeable stock or securities being herein called "Convertible Securities", but excluding options granted under stock option plans approved by the Corporation), whether or not such rights or options or the right to convert or exchange any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon the exercise of such rights or options or upon conversion or exchange of such Convertible Securities (determined by dividing (1) the total amount, if any, received or receivable by the Corporation as consideration for the granting of such rights or options, plus the minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the exercise of such rights or options, plus, in the case of such rights or options which relate to Convertible Securities, the minimum aggregate amount of additional consideration, if any, payable upon the issue or sale of such Convertible Securities and upon the conversion or exchange thereof, by (2) the total maximum number of shares of Common Stock issuable upon the exercise of such rights or options or upon the conversion or exchange of all such Convertible Securities issuable upon the exercise of such rights or options) shall be less than the Conversion Price in effect immediately prior to the time of the granting of such rights or options (or less than the Market Price, determined as of the date of granting such rights or options, as the case may be), then the total maximum number of shares of Common Stock issuable upon the exercise of such rights or options or upon conversion

or exchange of all such Convertible Securities issuable upon the exercise of such rights or options shall (as of the date of granting of such rights or options) be deemed to be outstanding and to have been issued for such price per share. Except as provided in subclause (D) below, no further adjustment of the Conversion Price shall be made upon the actual issue of such Common Stock or of such Convertible Securities upon exercise of such rights or options or upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities.

(C) Issuance of Convertible Securities - In case at any time after the date hereof the Corporation shall in any manner issue (whether directly or by assumption in a merger or otherwise) or sell any Convertible Securities, whether or not the rights to exchange or convert thereunder are immediately exercisable, and the price per share for which Common Stock is issuable upon such conversion or exchange (determined by dividing (1) the total amount received or receivable by the Corporation as consideration for the issue or sale of such Convertible Securities, plus the minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the conversion or exchange thereof, by (2) the total maximum number of shares of Common Stock issuable upon the conversion or exchange of all such Convertible Securities) shall be less than the Conversion Price in effect immediately prior to the time of such issue or sale (or less than the Market Price, determined as of the date of such issue or sale of such Convertible Securities, as the case may be), then the total maximum number of shares of Common Stock issuable upon conversion or exchange of all such Convertible Securities shall (as of the date of the issue or sale of such Convertible Securities) be deemed to be outstanding and to have been issued for such price per share; provided, however, that (a) except as otherwise provided in subclause (D) below, no further adjustment of the Conversion Price shall be made upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities, and (b) if any such issue or sale of such Convertible Securities is made upon exercise of any rights to subscribe for or to purchase or any option to purchase any such Convertible Securities for which adjustments of the Conversion Price have been or are to be made pursuant to other provisions of this clause (vi), no further adjustment of the Conversion Price shall be made by reason of such issue or sale.

(D) Change in Option Price or Conversion Rate - Upon the happening of any of the following events, namely, if the purchase price provided for in any right or option referred to in subclause (B), the additional consideration, if any, payable upon the conversion or exchange of any Convertible Securities referred to in subclause (B) or (C), or the rate at which any Convertible Securities referred to in subclause (B) or (C) are convertible into or exchangeable for Common Stock shall change (other than under or by reason of provisions designed to protect against dilution), the Conversion Price then in effect hereunder shall forthwith be readjusted (increased or decreased, as the case may be) to the Conversion Price which would have been in effect at such time had such rights, options or Convertible Securities still outstanding provided for such changed purchase price, additional consideration or

conversion rate, as the case may be, at the time initially granted, issued or sold. On the expiration of any such option or right referred to in subclause (B) or the termination of any such right to convert or exchange any such Convertible Securities referred to in subclause (B) or (C), the Conversion Price then in effect hereunder shall forthwith be readjusted (increased or decreased, as the case may be) to the Conversion Price which would have been in effect at the time of such expiration or termination had such right, option or Convertible Securities, to the extent outstanding immediately prior to such expiration or termination, never been granted, issued or sold, and the Common Stock issuable thereunder shall no longer be deemed to be outstanding. If the purchase price provided for in any such right or option referred to in subclause (B) or the rate at which any Convertible Securities referred to in subclause (B) or (C) are convertible into or exchangeable for Common Stock shall be reduced at any time under or by reason or provisions with respect thereto designed to protect against dilution, then in case of the delivery of shares of Common Stock upon the exercise of any such right or option or upon conversion or exchange of any such Convertible Securities, the Conversion Price then in effect hereunder shall, if not already adjusted, forthwith be adjusted to such amount as would have obtained had such right, option or Convertible Securities never been issued as to such shares of Common Stock and had adjustments been made upon the issuance of the shares of Common Stock delivered as aforesaid, but only if as a result of such adjustment the Conversion Price then in effect hereunder is thereby reduced.

(vii) No Impairment. The Corporation will not, by amendment of its Articles of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the 1997 Series B Stock but will at all times in good faith assist in the carrying out of all the provisions of this section and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the holders of the 1997 Series B Stock against impairment.

(viii) Certificates as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series B Conversion Ratio, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of 1997 Series B Stock a certificate executed by the Corporation's President or Chief Financial Officer setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of 1997 Series B Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Series B Conversion Ratio at the time in effect, and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of the 1997 Series B Stock.

(ix) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its

authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of 1997 Series B Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the 1997 Series B Stock.

(x) Fractional Shares. No fractional share shall be issued upon the conversion of any share or shares of 1997 Series B Stock. If the conversion would result in the issuance of a fraction of a share of Common Stock, the Corporation shall, in lieu of issuing any fractional share, pay the holder otherwise entitled to such fraction a sum of cash equal to the fair market value of such fraction on the date of conversion as determined in good faith by the Board.

- (d) Redemption Rights of the Corporation. At the option of the Board, the Corporation may, at any time at which the 1997 Series B Stock is convertible into Common Stock, redeem from any source of funds legally available therefor, all or any portion of the outstanding shares of 1997 Series B Stock, at a redemption price per share equal to \$7.35 (the "Series B Redemption Price") plus all declared and unpaid dividends thereon, by giving written notice to each holder of record of 1997 Series B Stock to be redeemed (a "Series B Redemption Notice") at its post office address last shown on the records of the Corporation, not later than 30 days prior to the date fixed for any redemption (a "Series B Redemption Date") specifying the number of shares of 1997 Series B Stock that are to be redeemed on the Series B Redemption Date specified in such Series B Redemption Notice. On such Series B Redemption Date, the Corporation will pay to each holder of 1997 Series B Stock, upon surrender for cancellation to the Corporation at its principal office of the certificates, duly endorsed in blank, representing the shares of 1997 Series B Stock to be redeemed on such Series B Redemption Date, an amount per share equal to the Series B Redemption Price thereof plus all declared but unpaid dividends thereon. If less than all of the shares represented by any such certificate are redeemed, the shares to be redeemed shall be selected from the then outstanding shares on a pro rata basis and a new certificate shall be issued representing the unredeemed shares. Until the Series B Redemption Date, holders of the 1997 Series B Stock shall be entitled to the full preferences, limitations and relative rights of such stock. The holders of such shares of 1997 Series B Stock shall cease to have any further rights, other than the right to receive the Series B Redemption Price thereof plus such declared and unpaid dividends, with respect to the 1997 Series B Stock on the Series B Redemption Date.
- (e) Liquidation Rights. In the event of any liquidation, dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, the holders of shares of 1997 Series B Stock then outstanding shall be entitled to be paid, in cash, out of the assets of the Corporation available for distribution to its stockholders, before any payment or declaration and setting apart for payment of any amount shall be made in respect of any shares of Common Stock or any other shares of the Corporation junior or subordinate to the 1997 Series B Stock, (i) \$4.00 per share, together with all declared and unpaid

dividends on the 1997 Series B Stock, plus (ii) an amount equal to the Corporation's net assets remaining after the payment of the amount described in clause (i) above and reduced by the amount payable to the holders of the 1996 Series A Stock as provided in clause (i) of Section C(e) of these Articles of Incorporation, multiplied by the percentage of the Common Stock, on a fully diluted basis, that would be owned by holders of the 1997 Series B Stock if converted into Common Stock, such amount to be distributed among the holders of the 1997 Series B Stock on a pro rata basis. The preferential liquidation rights of the 1997 Series B Stock shall be superior to preferential liquidation rights of the 1996 Series A Stock. If, upon any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, the assets to be distributed among the holders of shares of 1997 Series B Stock are insufficient to permit the payment to such holders of the entire preferential amount provided for in clause (i) above, then all of the net assets of the Corporation shall be distributed pro rata and in proportion to the amounts each holder is entitled to receive among the holders of shares of 1997 Series B Stock.

- (f) Protective Provisions. For as long as 1997 Series B Stock is outstanding, the Corporation shall not, without the prior written consent or affirmative vote of holders of at least a majority of the outstanding 1997 Series B Stock:
- (1) authorize or issue any other capital shares of the Corporation which rank superior to the 1997 Series B Stock with respect to conversion, dividends, redemption, liquidation, antidilution or other preferences, designations, rights or powers;
 - (2) authorize or issue any securities of the Corporation which have voting rights superior to 1997 Series B Stock; or
 - (3) otherwise amend, alter or repeal the preferences, designations, rights or powers of the 1997 Series B Stock, or enter into any transaction that shall result in any such amendment, alteration or repeal, which would have an adverse effect upon holders of such shares. For this purpose, without limiting the generality of the foregoing, the authorization or issuance of other securities with preference or priority over the 1997 Series B Stock as to the right to receive either dividends or amounts distributable upon liquidation, dissolution or winding up of the Corporation, shall be deemed to affect adversely holders of the 1997 Series B Stock.
- (g) No Reissuance of Stock. No 1997 Series B Stock acquired by the Corporation by reason of redemption, purchase, or otherwise shall be reissued, and all such shares shall be canceled, retired and eliminated from the 1997 Series B Stock and shall return to the status of Preferred Stock authorized without designation.

E. Series A Junior Participating Preferred Stock. There is hereby created a new series of Preferred Stock designated "Series A Junior Participating Preferred Stock." The number of shares constituting such series initially shall be one million (1,000,000). Such number of shares may be

increased or decreased by the Board of Directors; provided, however, that no decrease shall reduce the number of shares of Series A Junior Participating Preferred Stock to a number less than the number of shares then outstanding plus the number of shares reserved for issuance upon the exercise of outstanding options, rights or warrants or upon the conversion of any outstanding securities issued by the Corporation convertible into Series A Junior Participating Preferred Stock. The Series A Junior Participating Preferred Stock shall have the preferences, limitations and relative rights set forth below:

(a) Dividends and Distributions.

(i) Subject to the prior and superior rights of the holders of any shares of any series of Preferred Stock ranking prior and superior to the shares of Series A Junior Participating Preferred Stock with respect to dividends, the holders of shares of Series A Junior Participating Preferred Stock, in preference to the holders of Common Stock and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available therefor, quarterly dividends payable in cash on the first day of February, May, August and November in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Junior Participating Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$1.00 or (b) subject to the provision for adjustment hereinafter set forth, 100 times the aggregate per share amount of all cash dividends, and 100 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Junior Participating Preferred Stock. In the event the Corporation shall on or at any time after February 21, 1999 (the "Rights Declaration Date") (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine or consolidate the outstanding shares of Common Stock into a smaller number of shares, then in each such case the amount to which holders of shares of Series A Junior Participating Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(ii) The Corporation shall declare a dividend or distribution on the Series A Junior Participating Preferred Stock as provided in paragraph (i) above immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, subject to the requirements of applicable law and the Amended and Restated Articles of Incorporation, in the event no dividend or distribution shall have been declared on the Common Stock

during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$1.00 per share on the Series A Junior Participating Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(iii) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Junior Participating Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series A Junior Participating Preferred Stock, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Junior Participating Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than 60 days prior to the date fixed for the payment thereof.

- (b) Voting Rights. The holders of shares of Series A Junior Participating Preferred Stock shall have the following voting rights:
- (i) Subject to the provision for adjustment hereinafter set forth, each share of Series A Junior Participating Preferred Stock shall entitle the holder thereof to 100 votes on all matters submitted to a vote of the shareholders of the Corporation. In the event the Corporation shall at any time on or after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine or consolidate the outstanding Common Stock into a smaller number of shares, then in each such case the number of votes per share to which holders of shares of Series A Junior Participating Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.
 - (ii) Except as otherwise provided herein, in any other amendment to the Amended and Restated Articles of Incorporation of the Corporation or bylaw, the holders of shares of Series A Junior Participating Preferred Stock and the holders of shares of Common Stock shall vote together as one group on all matters submitted to a vote of shareholders of the Corporation.

(iii) Except as set forth herein, holders of Series A Junior Participating Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

(c) Certain Restrictions.

(i) Whenever quarterly dividends or other dividends or distributions payable on the Series A Junior Participating Preferred Stock as provided in Paragraph (a) are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Junior Participating Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(A) declare or pay dividends on, redeem or purchase or otherwise acquire for consideration, or make any other distributions on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Junior Participating Preferred Stock;

(B) declare or pay dividends on, redeem or purchase or otherwise acquire for consideration, or make any other distributions on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Junior Participating Preferred Stock, provided that there may be declared and paid ratably dividends on the Series A Junior Participating Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled; and, provided further, that the Corporation may at any time redeem or purchase or otherwise acquire shares of any such parity stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Junior Participating Preferred Stock; or

(C) purchase or otherwise acquire for consideration any shares of Series A Junior Participating Preferred Stock, or redeem or purchase or otherwise acquire any shares of stock ranking on a parity with the Series A Junior Participating Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(ii) The Corporation shall not permit any subsidiary of the Corporation (for the account of such subsidiary) to purchase or otherwise acquire for consideration any shares of stock of the

Corporation unless the Corporation could, under paragraph (i) of this Paragraph (c), purchase or otherwise acquire such shares at such time and in such manner.

(iii) No dividend shall be declared and paid, or set apart for payment on, any share of the Series A Junior Participating Preferred Stock or any share of any other series of Preferred Stock or any share of any class of stock, or series thereof, ranking on a parity with the Series A Junior Participating Preferred Stock as to dividends, for any dividend period unless at the same time a like proportionate dividend for the same dividend period, ratably in proportion to the respective dividends applicable thereto, shall be declared and paid, or set apart for payment on, all shares of the Series A Junior Participating Preferred Stock and all shares of all other series of Preferred Stock and all shares of any class, or series thereof, ranking on a parity with the Series A Junior Participating Preferred Stock as to dividends, then issued and outstanding and entitled to receive dividends.

(d) **Reacquired Shares.** Any shares of Series A Junior Participating Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock, subject to the conditions and restrictions on issuance set forth herein, in the Amended and Restated Articles of Incorporation of the Corporation (including Articles of Amendment duly adopted in accordance with the North Carolina Business Corporation Act) creating a series of Preferred Stock or any similar stock, or as otherwise required by law.

(e) **Liquidation, Dissolution or Winding Up.**

(i) Upon any liquidation (voluntary or otherwise), dissolution or winding up of the Corporation, no distribution shall be made to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Series A Junior Participating Preferred Stock shall have received \$100 per share, plus an amount equal to all accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment (the "Series A Liquidation Preference"). Following the payment of the full amount of the Series A Liquidation Preference, no additional distributions shall be made to the holders of shares of Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Common Stock shall have received an amount per share (the "Common Adjustment") equal to the quotient obtained by dividing (a) the Series A Liquidation Preference by (b) 100 (as appropriately adjusted as set forth in subparagraph (iii) below to reflect such events as stock splits, stock dividends and recapitalizations with respect to the Common Stock) (such number in clause (b), the "Adjustment Number"). Following the payment of the full amount of the Series A Liquidation Preference and the Common Adjustment in respect of all outstanding shares of Series A Junior Participating Preferred Stock and Common

Stock, respectively, holders of Series A Junior Participating Preferred Stock and holders of shares of Common Stock shall receive their ratable and proportionate share of the remaining assets to be distributed in the ratio of the Adjustment Number to one (1) with respect to such Series A Junior Participating Preferred Stock and Common Stock, on a per share basis, respectively.

(ii) In the event, however, that there are not sufficient assets available to permit payment in full of the Series A Liquidation Preference and the liquidation preferences of all other series of Preferred Stock, if any, which rank on a parity with the Series A Junior Participating Preferred Stock, then such remaining assets shall be distributed ratably to the holders of the Series A Junior Participating Preferred Stock and such parity shares in proportion to their respective liquidation preferences. In the event that there are not sufficient assets available to permit payment in full of the Common Adjustment, then such remaining assets shall be distributed ratably to the holders of Common Stock.

(iii) In the event the Corporation shall at any time on or after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the Adjustment Number in effect immediately prior to such event shall be adjusted by multiplying such Adjustment Number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(iv) Neither the sale, lease or conveyance of all or substantially all of the property or business of the Corporation, nor the merger, consolidation or statutory share exchange of the Corporation into or with any other corporation or the merger, consolidation or statutory share exchange of any other corporation into or with the Corporation, shall be deemed to be a liquidation, dissolution or winding-up, voluntary or involuntary, for the purposes of this Paragraph (e).

- (f) Statutory Share Exchange, Merger Consolidation, etc. In case the Corporation shall enter into any statutory share exchange, merger, consolidation, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case the shares of Series A Junior Participating Preferred Stock shall at the same time be similarly exchanged or changed in an amount per share (subject to the provision for adjustment hereinafter set forth) equal to 100 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time on or after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine or

consolidate the outstanding Common Stock into a smaller number of shares, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Junior Participating Preferred Stock shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

- (g) No Redemption. The shares of Series A Junior Participating Preferred Stock shall not be redeemable.
- (h) Ranking. The Series A Junior Participating Preferred Stock shall rank junior to all other series of the Corporation's Preferred Stock as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise.
- (i) Amendment. The Amended and Restated Articles of Incorporation of the Corporation shall not be further amended in any manner which would materially alter or change the powers, preferences or special rights of the Series A Junior Participating Preferred Stock so as to affect them adversely, except in accordance with the provisions of Section 55-10-04 of the North Carolina Business Corporation Act, or as otherwise permitted by law.
- (j) Fractional Shares. Series A Junior Participating Preferred Stock may be issued in fractions of a share (which shall be integral multiples of one one-hundredth of a share of Series A Junior Participating Preferred Stock), which shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series A Junior Participating Preferred Stock.

III.

Except as otherwise provided in these articles or the bylaws, the Board of Directors of the Corporation shall have the power, by vote of a majority of all the directors, and without the assent or vote of the shareholders, to make, offer, amend, and rescind the Corporation's bylaws at any regular or special meeting of the Board of Directors.

IV.

The following provisions shall govern certain business combinations involving the Corporation. Capitalized terms not otherwise defined in these articles shall have the meanings ascribed to them in Section IV.D. of these articles.

A. Business Combinations. Any Business Combination shall require only such affirmative vote as is required by law and any other provision of these articles if either all of the conditions set forth in clauses (1), (2) and (3) of Section IV.A. have been satisfied or if the condition set forth in clause (4) of Section IV.A. have been satisfied:

(1) Form of Consideration. The consideration to be received by holders of Common Stock shall be cash or in the same form as previously has been paid by or on behalf of any Interested Shareholder in connection with its direct or indirect acquisition of beneficial ownership of any shares of Common Stock. If the consideration paid by or on behalf of the Interested Shareholder for shares of Common Stock varied as to form, the form of consideration to be received by holders of Common Stock shall be either cash or the form used to acquire beneficial ownership of the largest number of shares of Common Stock previously acquired by the Interested Shareholder.

(2) Amount of Consideration. The aggregate amount of the cash and the Fair Market Value of consideration other than cash to be received per share by holders of Common Stock in any Business Combination shall be at least equal to the greater of (a) the Fair Market Value per share of Common Stock on the date of the first public announcement of the proposal of a Business Combination (the "Announcement Date") or on the date on which the Interested Shareholder became an Interested Shareholder, whichever is higher, multiplied by the ratio of (i) the highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by the Interested Shareholder for any shares of Common Stock acquired by it within the two-year period immediately prior to the Announcement Date to (ii) the Fair Market Value per share of Common Stock on the first day in such two-year period on which the Interested Shareholder acquired any shares of Common Stock or (b) the highest per share price (including brokerage commissions, transfer taxes and soliciting dealers' fees) paid by such Interested Shareholder in acquiring any of the Corporation's Common Stock.

(3) Restrictions. After becoming an Interested Shareholder and prior to the consummation of any Business Combination, (a) such Interested Shareholder shall not have acquired any newly issued shares of capital stock, directly or indirectly, from the Corporation (except upon conversion of convertible securities acquired by it prior to becoming an Interested Shareholder or upon compliance with the provisions of Section IV of these articles or as a result of a pro rata stock dividend or stock split) and (b) such Interested Shareholder shall not have received the benefit, directly or indirectly (except proportionately as a shareholder), of any loans, advances, guarantees, pledges or other financial assistance or tax credits provided by the Corporation, or made any significant changes in the Corporation's business or equity capital structure.

(4) Fairness Opinion. The Business Combination shall have been approved by at least two-thirds of the Continuing Directors and, if deemed advisable by a majority of the Continuing Directors, the Board of Directors shall have obtained an opinion of a reputable investment banking firm to the effect that the financial terms of such Business Combination are fair from a financial point of view to the holders of Voting Shares (other than the Interested Shareholder) (such investment banking firm to be selected by a majority of the Continuing Directors, to be furnished with all information it reasonably requests and to be paid a reasonable fee for its services upon receipt by the Corporation of such opinion).

B. Shareholder Vote. If the provisions of Section IV.A. have not been satisfied, any Business Combination shall require the affirmative vote, in person or by proxy, at any meeting called as provided in the bylaws, of the holders of at least two-thirds in interest of the issued and outstanding Voting Shares of the Corporation, including a majority in interest of the holders of issued and outstanding Voting Shares of the Corporation held by Persons other than an Interested Shareholder or any Affiliate or Associate of any Interested Shareholder. Such affirmative vote shall be required notwithstanding the fact that no vote may be required, or that some lesser percentage may be specified by law or in any agreement with any national securities exchange or otherwise.

C. Exception. The provisions of Sections IV.A. and IV.B. shall not be applicable to any particular Business Combination, and such Business Combination shall require only such affirmative vote, if any, as is required by law and any other provision of these articles, if such Business Combination constitutes a transaction between the Corporation or any Subsidiary and any corporation of which a majority of the outstanding shares of all classes of stock entitled to vote in elections of directors is owned of record or beneficially by the Corporation or its Subsidiaries, provided that this Section IV.C. shall not apply to any transaction to which any Affiliate of any Interested Shareholder is a party.

D. Definitions. For the purposes of these articles:

(1) The term "Business Combination" shall mean any transaction which is referred to in any one or more of clauses (a) through (f) of this paragraph (1):

(a) Any merger, share exchange or consolidation of the Corporation or any Subsidiary with or into (A) any Interested Shareholder or (B) any other entity (whether or not itself an Interested Shareholder) which immediately before is, or after such merger, share exchange or consolidation would be, an Affiliate of an Interested Shareholder;

(b) Any sale, lease, exchange, mortgage, pledge, transfer or other disposition (in one transaction or a series of related transactions) to or with any Interested Shareholder or any Affiliate of any Interested Shareholder of any assets of the Corporation or any Subsidiary when such assets have an aggregate Fair Market Value of \$5,000,000 or more;

(c) The issuance or transfer to any Interested Shareholder or any Affiliate of any Interested Shareholder by the Corporation or any Subsidiary (in one transaction or a series of related transactions) of any equity securities of the Corporation or any Subsidiary where such equity securities have an aggregate Fair Market Value of \$5,000,000 or more;

(d) The adoption of any plan or proposal for the liquidation or dissolution of the Corporation;

(e) Any reclassification of securities (including any reverse stock split), or recapitalization of the Corporation, or any merger, share exchange or consolidation of the Corporation with or into any of its Subsidiaries or any similar transaction (whether or not with or into or otherwise involving an Interested Shareholder) which has the effect, directly or indirectly, of increasing the percentage of the outstanding shares of any class of equity or convertible securities of the Corporation or any Subsidiary which is directly or indirectly owned by any Interested Shareholder or any Affiliate of any Interested Shareholder; or

(f) Any agreement, contract or other arrangement providing for any of the transactions described in this definition of "Business Combination."

(2) A "Person" shall mean any individual, firm, corporation or other entity.

(3) "Interested Shareholder" shall mean any Person (other than the Corporation, any Subsidiary or a trustee holding stock for the benefit of the employees of the Corporation or its Subsidiaries) who or which, along with any Affiliates and Associates of the Interested Shareholder:

(a) Is the Beneficial Owner, directly or indirectly, of more than 10% of the Voting Shares of the Corporation or a Subsidiary; or

(b) Is an assignee of or has otherwise succeeded to any share of capital stock of the Corporation or a Subsidiary which was at any time within two years prior thereto beneficially owned by any Interested Shareholder, and such assignment or succession shall have occurred in the course of a transaction or series of transactions not involving a public offering within the meaning of the Securities Act of 1933. A Person shall be deemed an Interested Shareholder for the purpose of this definition if such Person is an Interested Shareholder as of the record date for the determination of shareholders entitled to notice of and to vote on any Business Combination, as of the date any definitive agreement relating to a Business Combination is entered into or amended so as to make it less favorable to the Corporation or its shareholders other than the Interested Shareholder, or immediately prior to the consummation of any such Business Combination.

(4) A Person shall be the “Beneficial Owner” of any Voting Shares:

(a) As to which such Person or any of its Affiliates and Associates, pursuant to any agreement, arrangement or understanding, or otherwise, has or shares, directly or indirectly, voting power, including the power to vote or direct the voting of such shares, or investment power, including the power to dispose or to direct the disposition of such shares, or both;

(b) Which such Person or any of its Affiliates or Associates has (i) the right to acquire (whether such right is exercisable immediately or only after the passage of time), pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, warrants or options, or otherwise or (ii) the right to vote pursuant to any agreement, arrangement or understanding; or

(c) Which are beneficially owned, directly or indirectly, by any other Person with which such first-mentioned Person or any of its Affiliates or Associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting or disposing of any shares of capital stock of the Corporation or a Subsidiary, as the case may be.

(5) “Voting Shares” when used with respect to the Corporation or a Subsidiary shall mean shares of such entity having general voting power. For the purpose of determining whether a Person is an Interested Shareholder pursuant to paragraph (3) of Section IV.D., the outstanding Voting Shares shall include shares deemed owned by a Beneficial Owner through application of paragraph (4) of Section IV.D. but shall not include any other Voting Shares which may be issuable to any other Person pursuant to any agreement or upon exercise of conversion rights, warrants or options, or otherwise.

(6) “Affiliate” and “Associate” shall have the respective meanings given those terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as in effect on June 30, 1997.

(7) “Subsidiary” shall mean any entity of which a majority of any class of equity security (as defined in Rule 3a11-1 of the General Rules and Regulations under the Securities Exchange Act of 1934, as in effect on June 30, 1997) is owned, directly or indirectly, by the

Corporation; provided, however, that for the purposes of the definition of Interested Shareholder set forth in paragraph (3) of Section IV.D., the term "Subsidiary" shall mean only an entity of which a majority of each class of equity security is owned, directly or indirectly, by the Corporation.

(8) "Continuing Director" shall mean an individual who was a member of the Board of Directors of the Corporation on the date Section IV of these articles was adopted by the shareholders of the Corporation, or a director who has been nominated by the Corporation to directly succeed a Continuing Director or to join the Board of Directors.

(9) "Fair Market Value" shall mean (i) in the case of stock, the highest closing sales price during the 30-day period immediately preceding the date in question of a share of such stock on the Composite Tape for New York Stock Exchange—Listed Stocks, or, if such stock is not quoted on the Composite Tape, on the New York Stock Exchange, or, if such stock is not listed on such Exchange, on the principal United States securities exchange registered under the Securities Exchange Act of 1934 on which such stock is listed, or, if such stock is not listed on any such exchange, as quoted in the NASDAQ National Market, or, if such stock is not included in such system, the highest closing bid quotation with respect to a share of such stock during the 30-day period preceding the date in question on the National Association of Securities Dealers, Inc. Automated Quotations System or any system then in use, or, if no such quotations are available, the fair market value on the date in question of a share of such stock as determined in good faith by a majority of Continuing Directors, and (ii) in the case of property other than cash or stock, the fair market value of such property on the date in question as determined in good faith by a majority of Continuing Directors.

E. The Continuing Directors, by a majority vote, shall have the power to determine for the purposes of Section IV on the basis of information known to them (1) the number of Voting Shares beneficially owned by any Person, (2) whether a Person is an Affiliate or Associate of another, (3) whether a Person has an agreement, arrangement or understanding with another as to the matters referred to in paragraph (4) of Section IV.D., (4) whether the assets of the Corporation or any Subsidiary have an aggregate fair market value of \$5,000,000 or more, (5) whether the consideration received for the issuance or transfer of securities by the Corporation or any Subsidiary has an aggregate fair market value of \$5,000,000 or more and (6) such other matters with respect to which a determination is necessary or appropriate under Section IV.

F. Nothing contained in Section IV shall be construed to relieve any Interested Shareholder from any fiduciary obligation imposed by law.

V.

Except as otherwise provided herein (and in addition to any other vote that may be required by law, these articles or the bylaws of the Corporation), the affirmative vote, in person or by proxy, at any meeting called as provided in the bylaws, of the holders of at least two-thirds in interest of the Voting Shares of the Corporation issued and outstanding, shall be required to amend, alter or repeal Sections II, IV, V and VI of these articles or Section 4 of Article II and Section 2 of Article III of the bylaws, or to adopt any new provision inconsistent with such provisions of these articles or the bylaws; provided, however, that if at the time of any such proposed amendment, alteration, repeal or adoption, (a) there shall exist one or more Interested Shareholders and at least two-thirds of the Continuing Directors approve such proposed amendment, alteration, repeal or adoption, or (b) no such Interested Shareholder exists, and a majority of the members of the Board of Directors approve such proposed amendment, alteration, repeal or adoption, then the affirmative vote, in person or by proxy, at any meeting called as provided in the bylaws, of the holders of a majority in interest of the issued and outstanding Voting Shares of the Corporation shall be required to approve such amendment, alteration, repeal or adoption.

VI.

The provisions of Articles 9 and 9A of Chapter 55 of the General Statutes of North Carolina shall not apply to the Corporation.

VII.

To the full extent from time to time permitted by law, no person who is serving or has served as a director of the Corporation shall be personally liable in any action for monetary damages for breach of his or her duty as a director, whether such action is brought by or in the right of the Corporation or otherwise. Neither the amendment or repeal of this Article, nor the adoption of any provision of these Articles of Incorporation inconsistent with this Article, shall eliminate or reduce the protection afforded by this Article to a director of the Corporation with respect to any matter which occurred, or any cause of action, suit or claim, which but for this Article would have accrued or arisen, prior to such amendment, repeal or adoption.

VIII.

The name and address of the incorporator are Sheri L. Crockett, 2100 First Union Capitol Center, 150 Fayetteville Street Mall, Post Office Box 831, Raleigh, NC 27602, North Carolina 27601.

SCHEDULE OF SUBSIDIARIES

Charles & Colvard, Ltd. (Registrant), a North Carolina Corporation

Wholly-owned Subsidiary:

Charles & Colvard (HK) Ltd., a Hong Kong Corporation

Controlled Company:

Guangzhou Charles & Colvard Trading Limited, a Chinese Corporation

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-43613 and Registration Statement No. 333-93211 of C3, Inc. on Form S-8 and in Registration Statement No. 333-100883 of Charles & Colvard, Ltd. on Form S-8 of our report dated March 10, 2005, appearing in this Annual Report on Form 10-K of Charles & Colvard, Ltd. for the year ended December 31, 2004.

DELOITTE & TOUCHE LLP
Raleigh, North Carolina
March 18, 2005

I, Robert S. Thomas, certify that:

1. I have reviewed this annual report on Form 10-K of Charles & Colvard, Ltd.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on the registrant's most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 17, 2005

/s/ Robert S. Thomas

Robert S. Thomas
President & Chief Executive Officer

I, James R. Braun, certify that:

1. I have reviewed this annual report on Form 10-K of Charles & Colvard, Ltd.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on the registrant's most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 17, 2005

/s/ James R. Braun

James R. Braun
Vice President of Finance & Chief Financial Officer

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Charles & Colvard, Ltd. (the "Company") on Form 10-K for the period ending December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert S. Thomas, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15 (d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert S. Thomas

Robert S. Thomas
President and Chief Executive Officer

March 17, 2005

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Charles & Colvard, Ltd. (the "Company") on Form 10-K for the period ending December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James R. Braun, Vice President of Finance and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15 (d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James R. Braun

James R. Braun
Vice President of Finance and
Chief Financial Officer

March 17, 2005

A signed original of this written statement required by Section 906 has been provided to Charles & Colvard, Ltd. and will be retained by Charles & Colvard, Ltd. and furnished to the Securities and Exchange Commission or its staff upon request.