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## VIA ELECTRONIC AND U.S. MAIL

The Honorable Donald S. Clark Secretary Federal Trade Commission 600 Pennsylvania Avenue, N.W. Washington, DC 20580

Dear Mr. Clark:

On behalf of the Jewelers Vigilance Committee and ten other major associations, <sup>1</sup> I am submitting a petition, pursuant to the Commission's Rules of Practice, 16 C.F.R. § 1.6, requesting that the FTC initiate a proceeding to amend the Guides for the Jewelry, Precious Metals, and Pewter Industries, 16 C.F.R. Part 23, to address the use of the term "cultured" in connection with lab-grown gemstones.

Very truly yours,

Elaine D. Kolish

### Enclosure

cc: Lydia B. Parnes, Director, Bureau of Consumer Protection James A. Kohm, Associate Director, Division of Enforcement Robin Rosen Spector, Senior Attorney, Division of Enforcement

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<sup>&</sup>lt;sup>1</sup> We are still completing the administrative task of obtaining signatures. A supplemental submission with all signatures will be sent at a future date.



# UNITED STATES OF AMERICA BEFORE THE FEDERAL TRADE COMMISSION Washington, D.C. 20580

In Re: Petition to Amend Guidelines For	
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Industries.	

## I. Introduction.

The Jewelers Vigilance Committee (hereinafter, the "JVC") petitions the Federal Trade Commission ("FTC"), pursuant to 16 C.F.R. § 1.6, to amend the Guidelines for the Jewelry, Precious Metals, and Pewter Industries (hereinafter, the "Guides"), 16 C.F.R. Part 23, to address the use of the term "cultured" in conjunction with lab-grown gemstones. The proposed amendment would add the term "cultured" to the list of other terms in Section 23.24 of the Guides that the Commission has already determined are unfair or deceptive to use in conjunction with manufactured products. The JVC, as well as ten (10) other jewelry industry trade associations, believe this amendment is needed to protect consumers from the deceptive or unfair business practices that occur with the use of the term "cultured" in conjunction with jewelry industry products other than pearls.

This amendment is needed because a legal analysis of current marketing claims for labgrown diamonds, in conjunction with the regulatory, technological and industry history
regarding synthetic products, indicates that when the term "cultured" is used with synthetic
diamonds, consumers are likely to be misled about the nature of the product. Consumer survey
data obtained by the JVC indicates that consumers widely and erroneously associate the phrase
"cultured diamond" as meaning a *natural product* or gemstone grown *naturally* with human
intervention. Specifically, the use of the term "cultured" in the context of a lab-grown product
incorrectly implies that the product has been created in an organic process, with humans simply
initiating the natural diamond growth process, rather than artificially replicating it in a
laboratory. The historical high regard consumers have for cultured pearls, combined with

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<sup>&</sup>lt;sup>1</sup> See 16 C.F.R. § 23.24 and n. 50, infra for the text of the proposed amendment.

current consumer interest in natural and organic products, make it particularly critical that the Commission amend the Guides as requested to prevent consumers from being misled into believing lab-grown diamonds are similar to cultured pearls or created in a process that is like the one used for pearls.<sup>2</sup>

Nearly 50 years ago, the FTC addressed concerns regarding the use of the term "cultured" for materials other than pearls, when it charged a seller of synthetic emeralds with deceptive advertising for describing its products as "Cultured Emeralds." Today, technological innovations and market changes make the concern a pressing one in connection with marketing practices in the synthetic diamond industry. The synthetic diamond industry, once known exclusively for the manufacture of diamonds for industrial purposes, is now producing jewelry quality diamonds in significant quantities and further significant growth is expected in the years to come. These technological innovations and the growth of production in this market from a novelty to a mass-produced product have occurred since the completion of the last comprehensive review of the Guides in 1996 and the completion of a separate proceeding in 2000 addressing treatments to diamonds. Thus, the Commission has not previously had an opportunity to fully consider the issue, and the consumer perception data that is now available.

As explained below, there are substantial and material differences between the natural and organic process that creates cultured pearls and the manufacturing process that creates synthetic diamonds. Because of these differences "cultured" and "synthetic" are not terms that can be used interchangeably.<sup>4</sup> Additionally, empirical data, consisting of three recent surveys of consumers (conducted in 2002, 2005 and 2006), show that consumers understand "cultured" to be a natural growth process with some human intervention, and that they value cultured products more than synthetic ones. These data show that consumers are likely to be misled or at best

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<sup>&</sup>lt;sup>2</sup> The culturing process for pearls, as explained in detail in Part III.C, is largely a natural one involving organic materials. Consumer preference and demand for "natural" and "organic" products of all types (e.g., food, cleaners, cosmetics, textiles) is growing exponentially. See "Industry Stats," at http://www.organicexpo.com. With this growth the need for standards and government intervention to ensure that these terms are used appropriately in marketing also has grown, particularly in the organic food context. See 7 C.F.R. Part 205 (USDA/Agricultural Marketing Services National Organic Program, setting, for example, definitions for "organic," and "made with organic ingredients"). The need for standards is also present in the jewelry industry.

<sup>&</sup>lt;sup>3</sup> See Chatham Research Laboratories, 64 F.T.C. 1065 (1964).

<sup>&</sup>lt;sup>4</sup> Indeed, the Guides prohibit the use of the term "synthetic" to describe cultured pearls because cultured pearls do not meet the Guides' definition of synthetic (16 C.F.R. § 23.20(k)). The FTC should similarly admonish against the use of the term "cultured" for synthetic products as they are not formed through the traditional organic process that is referenced in the Guides. See 16 C.F.R. § 23.18(b).

confused about the nature of the product they are purchasing when the term "cultured" is used to describe a lab-grown diamond or the process that created that product. Thus, representations that such diamonds are "cultured" products are likely to mislead consumers to their detriment.

Synthetic diamonds, when truthfully represented, are a welcome addition to the jewelry marketplace, which provides consumers with a vast array of jewelry products at every price point. However, when such manufactured products are represented as "cultured" products, a term historically used to describe the natural and organic process for producing pearls, and which is defined in the Guides in conjunction with pearls, consumer deception may occur. Because of this, and the industry's need to foster consumer confidence in the industry and their desire to maintain high ethical standards, all of the leading trade associations in the jewelry industry support the proposed amendment. Additionally, the proposed amendment would be consistent with recent or newly-issued standards and definitions set by other countries that have considered this issue, by international standard-setting bodies, and other respected organizations.

For all of these reasons, FTC guidance at this point in time is necessary to help this emerging industry to grow while ensuring that consumers are not misled about the characteristics of its products. As the Commission is aware, the industry assigns great importance to the Guides and because of this and their importance to jewelry consumers the Commission has devoted significant time and resources to drafting and updating the Guides. It is crucial that the Guides continue to be adjusted to reflect changes in the market place and for the Commission to be cognizant of the view of leaders in the industry who are devoted to preserving consumer confidence in the industry by developing and maintaining standards to avoid deceptive practices and to promote ethical practices. Our goal is to create a set of standards that, when universally applied, will justify continued consumer confidence in our industry. The JVC strongly believes that the requested amendment is in the public interest and would facilitate a more widespread and equitable observance of the FTC Act as it applies to advertising and marketing practices in the jewelry industry.<sup>5</sup>

In Part II, we provide information about the JVC, its role in educating and policing the industry, and about the other associations that support this Petition. In Part III, we explain the

<sup>&</sup>lt;sup>5</sup> The purpose of FTC Guides is to provide the basis for voluntary and simultaneous abandonment of unlawful practices by members of the industry. *See* 16 C.F.R. Part 17.

important differences among synthetic, natural and cultured products. In Part IV, we discuss the current production of and marketing for lab-grown or synthetic diamonds. Part V describes the consumer perception data that we are submitting, showing how consumers interpret the terms "synthetic" and "cultured." Part VI describes how the FTC now addresses the term "cultured," and Part VII explains why the Guides need to be amended. In Part VIII, we explain how the proposed amendment would be consistent with the regulatory approach taken in other countries and by leading standard-setting and other relevant organizations. Part IX presents our conclusions and summarizes why FTC action is needed now.

## II. Background on the JVC and the Associations Supporting This Petition.

## A. The JVC and Its Mission.

The JVC is a trade association, founded in 1917, whose nearly 10,000 members come from all sectors of the jewelry industry. Its central mission is to uphold and maintain the integrity and ethics of the jewelry industry through the promotion of compliance with the legal standards that apply to its trade practices. It enjoys the support not only of every sector of the industry, but also a wide array of service providers in the industry, including banks, insurance companies, accountants, legal professionals, gemological laboratories and more. The JVC is the main recipient of complaints from consumers and from members of the trade regarding instances of non-compliance with accepted trade practices. The JVC investigates and resolves these allegations through its Alternative Dispute Resolution Service or through close cooperation with federal, state and local law enforcement agencies. The JVC also works closely with government regulators to help them understand the industry and to provide them with up-to-date information regarding industry practices.

One of the JVC's main missions is to ensure that the industry understands and complies with applicable laws. In this regard, the industry looks to the FTC Guides as the primary source of industry standards and regulations. The Guides are universally cited as the "Bible" for all levels of industry because all industry segments are acutely concerned about regulatory requirements that apply to their businesses. Accordingly, the JVC dedicates a considerable portion of its resources to disseminating and policing compliance with the Guides. Also reflecting the industry-wide importance of the Guides, other industry educational institutions, such as the Gemological Institute of America, the American Gem Society, and other jewelry

trade associations (including those undersigned), offer training on the Guides. It is no surprise then that most jewelers keep the Guides handy at their retail and manufacturing locations for easy reference, and the decisions they make about the language they use to sell and promote their products are sourced in these Guides.

## B. Other Associations Supporting the Petition.

All of the leading jewelry industry trade associations, representing all sectors of the industry, endorse an amendment to the Guides prohibiting the use of the term "cultured" in connection with non-pearl products. In reaching a consensus favoring this amendment, the jewelry industry is seeking to protect consumers from misleading descriptions.

The specific trade associations that endorse this clarification of terminology in the FTC Guides are:

- The American Gem Society ("AGS"), founded in 1934 by Robert M. Shipley, is a trade association dedicated to proven ethics, knowledge and consumer protection within the jewelry industry. Members are held to the highest ethical standards in the industry and are re-certified annually to maintain their AGS titles. AGS' membership consists of 1,600 firms and 3,500 credentialed jewelers.
- The American Gem Trade Association ("AGTA") is an association of natural colored gemstone and cultured pearl industry professionals in the United States and Canada that is dedicated to promoting the natural colored gemstone and cultured pearl trade. AGTA pursues its aims through the combined use of educational programs, industry events, industry relations and publicity to the trade and consumers while promoting and maintaining the highest ethical standards among its members and within the industry.
- CIBJO is the international jewelry confederation of national trade associations. CIBJO's purpose is to encourage harmonization, promote international cooperation in the jewelry industry and to consider issues that concern the trade worldwide. CIBJO's chief mission is to protect consumer confidence in the industry.
- The Cultured Pearl Association is the leading association of dealers in cultured pearls dedicated to the education of consumers and members of the trade about the qualities and characteristics of cultured pearls.
- The Diamond Council of America is an association representing 6,200 jewelry stores that provides quality, affordable education to its members and associations enhancing their ability to sell fine jewelry with expertise, integrity and professionalism.
- The Diamond Manufacturing and Importers Association of America represents hundreds of diamond professionals including cutters, polishers, dealers, traders, manufacturers of diamond jewelry and more. The commitment of the organization is

- to ethical business practices in compliance with all legal standards applicable to the sale and manufacture of diamonds.
- The International Diamond Manufacturers Association is a confederation of diamond manufacturing organizations from around the world. Its thousands of associated members agree to a code of conduct pertaining to the manufacture and sale of diamonds. The organization sets standards of conduct and ensures the highest ethical conduct among its members in the diamond trade.
- The Jewelers of America ("JA") is the national trade association of the retail jewelry industry. JA represents nearly 14,000 jewelers nationwide and serves as a center of knowledge and as an advocate for professionalism and high social, ethical and environmental standards in the jewelry trade.
- The Manufacturing Jewelers and Suppliers of America is a national trade association with over 1,750 members, which includes finished jewelry manufacturers, designers and industry suppliers.
- The World Federation of Diamond Bourses ("WFDB") was founded in 1947 to unite and to provide bourses trading in rough and polished diamonds and precious stones, with a common set of trading practice. The WFDB provides a legal framework and convenes to enact regulations for its 26 member diamond bourses around the world. Ethics, good business practices and morality are paramount and these are protected vigorously by the Constitution of the WFDB which provides for Arbitration and Disciplinary procedures against any bourse member who transgresses the code. The purpose of the WFDB is to promote understanding and closer co-operation between peoples all over the world who earn their livelihood in the diamond and precious stones trade.

The above trade associations represent tens of thousands of companies from all sectors of the jewelry industry, with potentially significant differing interests and perspectives. Despite these potential differences, there is a strong consensus among all sectors on this issue. All of the above trade associations believe the term "cultured" is appropriate only to describe pearls that are created through the traditional, organically-based culturing process described in the Guides. This consensus speaks both to the propriety of the requested amendment, and to the urgency of its incorporation into the Guides.

## III. The Differences Among Synthetic, Natural and Cultured Jewelry Products.

Before discussing why an amendment to the Guides is needed to promote non-misleading advertising, it is important to understand the significant differences among synthetic, natural and cultured products, and how the production and marketing of synthetic diamonds have changed.

## A. The Industrial History of Synthetic Diamonds.

In the past few years the technologies capable of producing laboratory-created diamonds of gem-quality have improved dramatically. There are now several different methods for creating large (one carat or larger) and high quality (colorless to near colorless) products and for producing relatively large quantities of these products. These include the High Pressure High Temperature ("HPHT") method<sup>6</sup> and the Chemical Vapor Deposition ("CVD") method.<sup>7</sup> These methods<sup>8</sup> currently are being employed by several companies, including the Gemesis Corporation (hereinafter, "Gemesis"), Chatham Created Gems Inc. (hereinafter, "Chatham") (both use HPHT), and the Apollo Diamond Corporation (uses CVD). This has resulted in the unprecedented production and sale of synthetic diamonds.

## B. The Properties of Synthetic Diamonds.

Natural diamonds and synthetic diamonds have very similar chemical composition, physical properties and structure; they are both made of a very dense form of pure carbon and have a very similar degree of hardness, refractive index, and dispersion. Because of this, to the unaided eye, synthetic diamonds have all the same optical, chemical and physical characteristics of a natural diamond. Indeed, distinguishing whether a diamond product is made from natural or synthetic diamonds often requires training and sometimes the use of sophisticated and expensive-

<sup>&</sup>lt;sup>6</sup> The HPHT process, which was developed by General Electric in the mid-1950s, uses high heat and high pressure inside a ceramic vessel, where small synthetic crystals are used as seeds that act as templates for further crystal growth. *See* Gemological Institute of America (GIA), James E. Shigley, GEMS & GEMOLOGY IN REVIEW, SYNTHETIC DIAMONDS, Preface, at X (2005).

<sup>&</sup>lt;sup>7</sup> CVD takes place in a low-pressure hydrogen/hydrocarbon gas environment inside a metal reactor with a vacuum system, gas injectors, and counter electrodes, and under only moderately high temperatures. In this process, single-crystal synthetic plates are used as substrates, which act as templates for further crystal growth. This technology was first developed in 1952. GIA, James E. Shigley. GEMS & GEMOLOGY IN REVIEW, SYNTHETIC DIAMONDS, *Tomorrow's Challenge: CVD Synthetic Diamonds*, at 231 (2005).

<sup>&</sup>lt;sup>8</sup> It is important to note that the HPHT and CVD processes are very distinct from the manufacture of imitation or simulant diamond products, which merely have an appearance similar to that of diamonds and are produced using fairly simple and unsophisticated techniques. These imitation products include cubic zirconia, synthetic rutile, YAG, synthetic moissanite, and even glass.

<sup>&</sup>lt;sup>9</sup> See, e.g., Martin Rapaport, A Diamond Is A Diamond? RAPAPORT NEWS, Diamonds.net, Oct. 8, 2003, at 5. <sup>10</sup> BBC Horizon, Diamond Labs Transcript, BBC 2, March 4, 2004, at www.gemesis.com, "News and Contacts;" see also Jennifer Mulrean, Man-Made Diamonds: A Girl's New Best Friend?, at http://moneycentral.msn.com/content/SavingandDebt/P97816.asp, and GIA, James E. Shigley, GEMS & GEMOLOGY IN REVIEW, SYNTHETIC DIAMONDS, at 246 (2005).

<sup>&</sup>lt;sup>11</sup> For example, Gemesis currently claims to produce at least 10,000 stones per year. *See also* n. 21, *infra*. Chatham claims it supplies at least 12,000 carats of HPHT synthetic diamonds per year. Apollo may be making 5,000 to 10,000 carats available. W. Boyajian, *Tomorrow's Challenge: CVD Synthetic Diamonds*, GEMS & GEMOLOGY, Editorial, Vol. 39, No. 4, 267 (2003).

to-develop-machinery that is available mainly at laboratories and main cutting and polishing centers <sup>12</sup>

However, there are significant differences between natural and synthetic diamonds. First, natural diamonds crystallized over a very long period of time naturally from carbon-based elements deep within the earth. In contrast, synthetic diamonds are produced in a matter of days or weeks in a chemical environment under controlled factory or laboratory conditions. Second, a close examination of synthetic diamonds reveals that they have different growth patterns from natural diamonds, different fluorescence distribution, and also contain different impurity and inclusion types. In addition, synthetic diamonds grown under HPHT conditions can contain metallic inclusions from the metallic melt in which they were grown.

Third, natural diamonds are a diminishing resource, and sometimes it requires highly technical mechanical means to find and extract them, whether from the earth, from rivers or from under the ocean. Natural diamond prices tend upwards on an annual basis. On the other hand, synthetic products are not rare and their costs are driven by the materials and increasingly efficient technology used to produce them. Thus, they can be and are marketed at substantially lower price points, such as 30% of what would be charged for a comparable mined diamond. As technology improves, the supply of synthetic products presumably will increase, thereby increasing the price differential between natural and synthetic products.

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<sup>&</sup>lt;sup>12</sup> Analytic equipment such as DiamondSure (a device that analyzes the stone's spectroscopic characteristics), and Diamond View (a device that uses ultraviolet radiation to reveal the stone's fluorescence and phosphorescence patterns) can be used to identify whether a diamond is natural or synthetic. GIA, James E. Shigley, GEMS & GEMOLOGY IN REVIEW, SYNTHETIC DIAMONDS, at 251 (2005).

<sup>&</sup>lt;sup>13</sup> The first known deposition of diamonds occurred 3.3 billion years ago; the most recent was 990 million years ago. "Integrated models of diamond formation and craton evolution," Shirey Richardson & Harris; Lithos 2004, vol. 77, No. 1-4, pp. 923-44.

<sup>&</sup>lt;sup>14</sup> It takes approximately 80 hours to produce a single synthetic diamond crystal of up to 3.5 carats. GIA, James E. Shigley, GEMS & GEMOLOGY IN REVIEW, SYNTHETIC DIAMONDS, at 178 (2005).

<sup>&</sup>lt;sup>15</sup> See GIA, James E. Shigley, GEMS & GEMOLOGY IN REVIEW, SYNTHETIC DIAMONDS, Box A: A Practical Guide for Separating Natural from Synthetic Diamonds, at 130-31 (2005); see also Jennifer Mulrean, Man-Made Diamonds: A Girl's New Best Friend?, at

http://moneycentral.msn.com/content/SavingandDebt/P97816.asp.

<sup>&</sup>lt;sup>16</sup> See, e.g., Diamonds: Made in the U.S.A., CBS NEWS, May 12, 2004 at http://www.cbsnews.com/stories/2004/05/10/6011/main616666.shtml.

## C. <u>How the Culturing Process for Pearls Differs From the Process For Creating</u> Synthetic Diamonds.

In the process of "culturing" pearls the only human intervention that occurs is the placing of an organic seed into a mollusk. The seed typically consists of a small piece of tissue from another mollusk and a bead, made of shell. Importantly, both the tissue and the bead are organic, natural materials. The introduction of an organic seed then prompts a living organism – the mollusk - to produce pearls through a biological process. During this process, the pearl grows at its own natural pace, in a manner exactly similar to the growth of a natural pearl. Notably, unlike the process for manufacturing synthetic diamonds, the culturing process for pearls takes place in the same habitats where natural pearls grow: natural bodies of water such as oceans, lakes and rivers.

The organic series of events that produce cultured pearls are clearly distinguishable from the manufacturing process for synthetic gems. The creation of a synthetic or lab-grown product is not an organic process; rather, the entire process is technologically directed in a factory setting. Although a so-called seed is used in the synthetic production process, this seed is commonly made from a tiny piece of synthetic material and is removed from the final product. Unlike the pearl culturing process, human intervention in the manufacturing process for synthetic gems extends far beyond the planting of a seed and then simply letting nature take its course. A combination of chemicals, chemical engineering, sophisticated machinery, advanced technology and science is necessary to produce synthetic diamonds and gems.

## IV. The Production and Marketing of Synthetic Diamonds.

The demand for (natural) diamond jewelry<sup>18</sup> in the U.S. is substantial and rising. In 2006, the diamond jewelry market was measured at over thirty-three (33) billion dollars, up from twenty-eight (28) billion dollars in 2005.<sup>19</sup> Against this back drop, the production of synthetic diamonds also has experienced dramatic growth in recent years and further significant growth is expected and planned. Some companies report that their current production is not meeting

<sup>&</sup>lt;sup>17</sup> GIA, COLORED STONES, Course material, Life's Gems, Assignment 5, at 6 (1997).

<sup>&</sup>lt;sup>18</sup> Diamond jewelry includes any jewelry piece that includes at least one natural diamond, no matter how small. Jewelers of America, THE COST OF DOING BUSINESS SURVEY (2005).

<sup>&</sup>lt;sup>19</sup> Diamond Promotion Service, April 2006.

demand<sup>20</sup> and others, such as Gemesis, have stated that they are increasing their production.<sup>21</sup> Products that were once a novelty are now fairly readily available.

Since 2000, when the production of synthetic diamonds began growing, the producers of synthetic, laboratory-created diamonds have actively marketed and promoted their products as "cultured diamonds." For example, by 2002, both Chatham and Gemesis had begun selling synthetic HPHT gem quality diamonds through marketing that described these laboratory-created diamonds with the term "cultured diamonds" or through comparisons to cultured pearls. These marketing efforts represent a clearly purposeful attempt to associate these products with cultured pearls, despite the vast differences in their origin and production, and to transfer high consumer regard for cultured pearls to lab-grown diamonds. These efforts have resulted in media reporting on this emerging sector of the jewelry industry using the term "cultured diamond" to describe these new synthetic products.

Current marketing for lab-grown diamonds include the following statements from the websites of the leading synthetic diamond manufacturers.

- **Gemesis'** website for "Gemesis, The Cultured Diamond" included the following statements: "One of the most common questions we are asked is 'What is the difference between a Gemesis Cultured Diamond™ and a mined diamond?' The answer is simply only where it came from. Diamonds are usually mined from underground, ours come from above the ground."<sup>22</sup>
- Chatham's website asks and answers the following question: "Is a Chatham Created Gemstone like a cultured pearl? Yes. Just as man provides the natural 'seeds' and

<sup>&</sup>lt;sup>20</sup> J. Shigley, Ch. Breeding, A. His-tien Shen, *An Updated Chart On The Characteristics of HPHT-Grown Synthetic Diamonds*, GEMS & GEMOLOGY, Vol. 40, No. 4, 303 (2004).

<sup>&</sup>lt;sup>21</sup> Gemesis predicts it will soon produce 20,000 carats of gem-quality synthetic diamonds annually, up from 4000 carats annually in 2002. J. Shigley, R. Abbaschian, and C. Clarke, *Gemesis Laboratory-Created Diamonds*, GEMS & GEMOLOGY, Vol. 38, No. 4, 301 (2002) and Sanjiv Arole, *Cultured Diamonds Are Here To Stay*, BUSINESS STANDARD, New Delhi, March 31, 2004.

<sup>&</sup>lt;sup>22</sup> http://www.gemesis.com, "About Our Diamonds." (visited March 2, 2006). See also

<sup>&</sup>quot;Gemesis" wants to be absolutely certain that it distinguishes diamonds grown by man from those grown in nature. 'Cultured' is a term that has been used for many years to describe pearls that are engineered by man. That is, where man has found a way to recreate nature's process, so Gemesis uses 'Cultured' and 'Laboratory-Grown' to describe accurately the origin of these diamonds. The term 'synthetic' is sometimes used to describe diamonds grown by man. However, it is often incorrectly interpreted as meaning 'fake' and, thus, is misleading. Even worse, the term 'synthetic' may be used by some to describe stones that aren't actually diamond. However, both 'Cultured' and 'Laboratory-Grown' fairly and clearly describe this unique jewelry product."

*Id.* (visited Nov. 15, 2006) (emphasis added). For the reasons discussed in Part III, *supra*, the term "cultured" does not fairly or accurately describe this product.

- controlled environment to help grow a cultured pearl, Chatham provides the natural elements and controlled environment to grow crystals."<sup>23</sup>
- **Apollo's** website contains the following statement: "Just as Mikimoto and Akoye introduced cultured pearls [...] Apollo has harnessed the natural growth process to bring you a cultured yet 100% pure diamond."<sup>24</sup>

The data from three consumer surveys, discussed below, show that the use of the term "cultured" is likely to be misunderstood by consumers, who associated "cultured" with an organic process. The Commission always has been sensitive to the effect on consumers of marketers' efforts to insinuate that their products have the same benefits or characteristics of other products, and the FTC's challenges to such practices, even when the practices are implied or subtle, have been upheld by the courts.<sup>25</sup> We ask that the FTC similarly respond to "cultured diamond" marketing by providing industry guidance on the use of the term "cultured" to help ensure consumers are not misled, directly or indirectly, when it is used in marketing for synthetic diamonds or other gemstones.

## V. Consumer Survey Results.

Since 2002, the JVC has overseen one consumer survey and been provided with two others on this topic. Each of these surveys, described below, indicates a high level of confusion among consumers concerning the meaning and true nature of "cultured diamonds." This confusion likely results in consumers being materially misled about the origin and characteristics of cultured diamonds. Notably, and in stark contrast to this confusion, consumer understanding of the term "cultured pearl" is very good. The Commission has relied upon similar consumer research in making other regulatory guidance decisions, such as its 1997 Enforcement Policy Statement on Made in USA and Other Origin Claims<sup>26</sup> and its Guides for the Use of Environmental Marketing Claims.<sup>27</sup> The research submitted with this Petition similarly provides a basis for further Commission guidance on the term "cultured."

<sup>&</sup>lt;sup>23</sup> http://www.chatham.com/faq.html, "The Chatham FAQs." (visited Feb. 24, 2006).

<sup>&</sup>lt;sup>24</sup> http://www.apollodiamond.com/gemstones.html, "Gem Quality Diamond Crystals." (visited Feb. 24, 2006).

<sup>&</sup>lt;sup>25</sup> See Telebrands Corp. v. Federal Trade Commission, 2006 WL 2243584 (4th Cir. Aug. 7, 2006).

<sup>&</sup>lt;sup>26</sup> 62 Fed. Reg. 63756 at 63763-64 (Dec. 2, 1997).

<sup>&</sup>lt;sup>27</sup> 16 C.F.R. Part 260. In particular, consumer perception data on consumer expectations for a "recycled" claim played a key role in the standard the Commission established for unqualified claims of "recycled content." 16 C.F.R. § 260(7)(e). The Commission also has cited its past reliance on such data in comments to other agencies recommending that they too set standards or create definitions for terms - in conjunction with consumer perception

### 2002 JVC Research

In 2002, the JVC conducted consumer research among sophisticated jewelry consumers. Research indicated that thirty-six percent (36%) of all respondents recalled hearing the term "cultured" applied to diamonds in product advertising or promotions. However, when asked the meaning of the term "cultured diamond," over sixty-six percent (66%) of respondents had an incorrect understanding or no understanding of the term. Specifically, over forty-one percent (41%) of respondents believed that a "cultured diamond" is a gemstone grown naturally with human intervention; another fourteen percent (14%) of respondents indicated that they did not understand the meaning of the term; eight percent (8%) of respondents believed "cultured diamonds" are found naturally in the earth, but enhanced or improved by man using chemicals or artificial substances; and three percent (3%) believed the phrase referred to a gemstone found naturally in the earth. Only one-third (33%) of respondents understood that the term described a laboratory-created product. In contrast, over ninety percent (90%) understood the term "synthetic diamond" to mean a laboratory-created product.

Quite unlike consumers' misunderstanding of the term "cultured diamond," sixty percent (60%) of respondents to the survey correctly understood that cultured pearls are naturally grown with human intervention.<sup>29</sup> Furthermore, over fifty-four percent (54%) of consumers understood the independent term "cultured," when used without qualifying the term "pearl" or any particular noun, to mean "naturally grown with human intervention." At the same time, when asked to identify which items describe "synthetic" in connection with fine diamond jewelry, over eighty percent (80%) of consumers believed "synthetic" to mean "artificially created" while close to forty-two percent (42%) understood "synthetic" to mean "laboratory grown."<sup>30</sup>

Of particular interest, and likely related to the above understandings, when respondents were presented with a choice of five descriptive terms, including "genuine," "cultured,"

data - to assist consumers in evaluating ad claims. See Comments of the Staff of the Bureau of Consumer Protection, the Bureau of Economics, and the Office of Policy Planning of the Federal Trade Commission, before the Department of Health and Human Services, Food and Drug Administration, "In the Matter of Draft Guidance for Industry and FDA Staff: Whole Grains Label Statements." Docket No. 2006-0066, April 18, 2006 at n. 23.

<sup>&</sup>lt;sup>28</sup> JVC's research study was conducted using MVI Marketing Ltd.'s Jewelry Consumer Opinion Council ("JCOC"). The JCOC uses a demographic sampling to gather respondent feedback to a questionnaire that is completed via email. The survey is attached as Exhibit A.

<sup>&</sup>lt;sup>29</sup> JCOC survey, Exhibit A. Note that for this question as well as some similar questions, respondents were given the opportunity to choose all applicable responses.

<sup>30</sup> Id.

"synthetic," "treated," and "enhanced," respondents ranked "cultured" products as the third most valuable, and "synthetic" products as the least valuable of the five. In addition, the JVC survey indicated that nearly all respondents (95%) would expect to pay less for synthetic diamond jewelry as compared to genuine diamond jewelry, while over twenty-five percent (25%) of respondents would expect to pay the same for cultured diamond jewelry, and four percent (4%) would pay more.

These findings are particularly important because they indicate that consumers believe "cultured" products are more valuable than "synthetic" products, and consequently might be willing to pay more for "cultured" diamond jewelry than for "synthetic" diamond jewelry. In the context of this discussion of synthetic diamonds and/or gemstones, the products being sold and marketed as "cultured" diamonds or gemstones are in fact no different from those laboratory-created products that are labeled as "synthetic."

### 2005 TNS Survey

In a second analysis of consumer perception regarding awareness and understanding of "cultured diamonds," TNS conducted telephone interviews with consumers in October 2005.<sup>31</sup> One-thousand (1,000) respondents, a sample representative of the United States population, were asked the following questions:

- "Have you heard of cultured diamonds?" (Yes/No/Don't Know)
- For both "yes" and "no": "What do you think they are?" (Open ended question)
- "Do you believe that cultured diamonds are a natural product?" (Yes/No/Don't Know)

When asked whether they believed that "cultured diamonds" are natural products, astonishingly over one-in-four respondents (26%) believed that "cultured diamonds" are in fact natural products. This percentage of respondents who believed that "cultured diamonds" are natural was not significantly impacted by whether or not they had already been exposed to the term. Further, one out of every seven (14.6%) respondents was not sure whether "cultured diamonds" are natural. In sum, over forty percent (40%) of respondents either thought "cultured diamonds" are natural, or did not know whether they are natural or man-made.

<sup>&</sup>lt;sup>31</sup> TNS is one of the world's leading market research firms with offices in 70 countries. Among other things, it conducts customized market surveys for clients in a wide range of industries. This survey is attached as Exhibit B.

Further, over thirty-four percent (34%) of the total respondents answered "don't know" when asked for their understanding of the term "cultured diamond." In fact, only thirty-two percent (32%) of all respondents had ever heard of the expression "cultured diamonds." For these respondents, over eight percent (8%) claimed that they still did not know the meaning of the term. Of those who had never before heard the expression "cultured diamond," almost half (47%) said that they did not know what they are.

Furthermore, those respondents who did provide an answer regarding their belief as to the meaning of the term gave a wide array of mostly inaccurate answers. Only about nine percent (9%) of the responses approached a fully accurate understanding of the term.<sup>32</sup> Even if all respondents' answers suggesting that "cultured diamonds" were understood to be generally non-natural are included,<sup>33</sup> only a total of thirty-five (35%) percent of respondents could be judged to hold even a basic understanding of the terminology.

### 2006 TNS Survey

In June 2006, TNS again surveyed consumers of fine jewelry through telephone interviews.<sup>34</sup> The study, which had over one thousand respondents, revealed that nine percent (9%) of respondents did not know the meaning of "cultured diamonds" and that forty-one percent (41%) of respondents believed that "cultured diamonds" are a natural product. In sum, this newest survey indicates that use of the term "cultured diamond" misrepresents, for a significant percentage of respondents, the origin of the product or how they are created.

## VI. How the FTC Has Previously Addressed the Term "Cultured."

The Commission or its staff has addressed the appropriate use of the term "cultured" in cases, the Guides, and in staff opinions, as discussed below. However, none of the Commission's prior actions definitively address this issue. Since this issue was last considered by the FTC staff, the marketplace has changed further. Additionally, there is now information in

<sup>&</sup>lt;sup>32</sup> Specifically, about five percent (5%) of respondents described "cultured diamonds" as "manufactured diamonds;" about 2 percent (2%) described "cultured diamonds" as "synthetic;" and about two percent (2%) described "cultured diamonds" as "lab-made."

<sup>&</sup>lt;sup>33</sup> Such responses would not exhibit any specific understanding of the difference between synthetic, or laboratory-created diamonds, and simulated diamonds, such as moissanite or cubic zirconia.

<sup>&</sup>lt;sup>34</sup> Respondents consisted of persons 18 or older whom either (1) reported purchasing or receiving as a gift fine jewelry in the past three years; or (2) expected to purchase or receive as a gift fine jewelry in the next year. This survey is attached as Exhibit C.

the form of consumer surveys, as discussed above, that demonstrate that Commission action to amend the Guides is critical. Finally, other countries and standard-setting entities have now addressed this issue and their conclusions support the need for an amendment to the Guides.

#### The Guides' Standards for the Description of Non-Natural Gem Materials. A.

## Background

The FTC Guides, as they currently exist, are the result of a comprehensive review that was completed more than 10 years ago.<sup>35</sup> The FTC initiated this review in 1992 in response to a Petition the JVC filed in 1986, and supplemented in 1989, and pursuant to a program to review all FTC rules and Guides periodically to ensure that they remain relevant and useful in light of any changed technological, marketplace or other conditions. As a result of this review, the Commission updated the language in the Guides to reflect the legal terminology used in the Commission's Deception and Unfairness Policy Statements and made numerous substantive revisions to the Guides to reflect technological developments. Certain issues relevant to this Petition also were discussed during this proceeding, as noted below, but were not definitively resolved.

## Relevant Sections of the Guides

The FTC Guides advise, in § 23.1, that it is unfair or deceptive to misrepresent any industry product in any material way, including the type, origin, preparation or production of an industry product. The Guides also highlight that to prevent deception any necessary qualifications or disclosures should be clear and prominent, and specifically emphasize the importance of clear language.<sup>36</sup>

The Guides also provide specific guidance on various industry products, such as diamonds and pearls, as noted below. Section 23.11(a) of the Guides defines a diamond as "a natural mineral consisting essentially of pure carbon crystallized in the isometric system" (emphasis added). Section 23.23(a)-(b) states that it is unfair or deceptive to use the unqualified name of any precious or semi-precious stone to describe any product that is not in fact a natural stone. To describe such material, a qualification must be included so that the name of the stone

 <sup>35 61</sup> Fed. Reg. 27178 (May 30, 1996).
 36 16 C.F.R. § 23.1, second "Note."

is immediately preceded by the word "laboratory-grown," "laboratory-created," "(manufacturer name)-created," "synthetic," "imitation," or "simulated" (depending on the nature of the material) in order to disclose clearly the nature of the product and the fact that it is not a natural gemstone.

In addition, § 23.23(c) states that it is "unfair or deceptive to use the word 'laboratorygrown, 'laboratory-created,' (manufacturer-name)-created,' or 'synthetic' with the name of any natural stone to describe any industry product unless such industry product has essentially the same optical, physical, and chemical properties as the stone named." In connection with cultured pearls, § 23.20(k) states that "it is unfair or deceptive to use the word 'synthetic' or similar terms to describe cultured or imitation pearls" since cultured pearls do not have the same optical, physical and chemical properties as natural pearls.<sup>37</sup>

## Unresolved Issues Regarding the Term "Cultured"

During the 1992-1996 review of the Guides, the JVC proposed amending the Guides to restrict the application of the term "cultured" to pearls and pearl products. The JVC believed, based on historical usage of the term and consumer familiarity with the term when used with pearls, that use of the term "cultured" to describe laboratory-created gemstones was misleading. Other participants in the proceeding took a contrary view and requested that the Commission specifically allow the term "cultured" for some or all of the then-used processes for manufacturing such products.<sup>38</sup>

The FTC concluded that there was insufficient evidence concerning relevant consumer perceptions to explicitly allow the use of the term "cultured" with synthetic gemstones.<sup>39</sup> At the same time, while it recognized the Commission's decision in the Chatham Research Laboratories case, which indicated that the word cultured as in "cultured emerald" is misleading (discussed below), the FTC decided not to explicitly prohibit the use of the term "cultured" with synthetic gemstones, again finding there was insufficient evidence on consumer perceptions on the term. 40 There is now, however, overwhelming evidence showing that the term "cultured"

<sup>&</sup>lt;sup>37</sup> See also 61 Fed. Reg. 27178, at 27204 (May 30, 1996). <sup>38</sup> Id. at 27208 and nn. 321-23.

<sup>&</sup>lt;sup>40</sup> Id. at 27209-10 (but adding the words "precious" and "semi-precious" to the list of words that are deceptive when applied to synthetic or imitation gemstones because they falsely imply rarity) (16 C.F.R. § 23.24).

when used with synthetic diamonds misconveys the nature of the product. This evidence should establish to the Commission's satisfaction that consumers consider "cultured" and "culturing" as reflecting a largely organic, natural process. Because the use of such terms in conjunction with lab-grown diamonds implies they too result from a natural and organic process, the Commission should restrict use of the term "cultured" for the same reason that the Commission restricted use of the terms "precious" and "semi-precious" in 1996 -- to prevent consumer deception.

#### B. The Chatham Research Laboratories Case.

In 1959, the Commission brought an enforcement action for deceptive advertising against Chatham Research Laboratories regarding its use of the designation "Chatham Cultured Emeralds."41 In that case, Chatham Research Laboratories advertised synthetic emeralds it had manufactured as "Chatham Cultured Emeralds (as well as through other phrases)." The Commission ruled that the use of the phrase "Chatham Cultured Emeralds" was deceptive because it "misrepresented that ... said synthetic stones or synthetic emerald products had been cultured ... when in fact they ... were not cultured." The Commission also concluded that the phrase "Chatham-Created Emerald," when used with the advertiser's name "Cultured Gem Stones, Inc.," created an ambiguity and implied that the emeralds are possibly cultured rather than synthetic and that this ambiguity was deceptive. The trade name, in the Commission's opinion, "destroyed the reasonable inference that a 'Chatham-Created Emerald' is a synthetic emerald.",42

Even though the order against Chatham has sunsetted under the Commission's "Sunset Policy," the principles the Commission applied in that case have not.<sup>43</sup> The Commission's analysis of the advertising and its finding that the term "cultured" is misleading when applied to synthetic gemstones is as relevant today as it was in 1964. 44

<sup>&</sup>lt;sup>41</sup> Chatham Research Laboratories, 64 F.T.C. 1065-74 (1964). <sup>42</sup> Id.

<sup>&</sup>lt;sup>43</sup> See 16 C.F.R. § 3.72(b)(3).

<sup>&</sup>lt;sup>44</sup> See also Advisory Opinion No. 260, Regarding Synthetic Emeralds (1968)(using "grown" in conjunction with synthetic emeralds is improper as consumers likely to associate "grown" with its commonly accepted meaning of natural growth and thus inaccurately conclude the product is a "cultured" stone).

#### C. Subsequent Proceedings at the FTC.

In July 2001, the JVC, prompted by technological developments making the production of jewelry quality lab-grown diamonds a viable commercial enterprise, 45 solicited a staff opinion letter on the issue of the use of the term "cultured" in connection with the marketing of these products. 46 In October 2001, the resulting FTC staff opinion letter stated that it was unclear whether consumers would understand that a "cultured" diamond was created in a laboratory and was not natural.<sup>47</sup> The FTC, however, unequivocally stated that because a synthetic diamond is not a natural diamond, the term "diamond" must be qualified so that consumers purchasing the product are not misled into thinking that the product is natural.<sup>48</sup>

It is noteworthy that the staff letter emphasized that because the term "cultured" had not been widely used to describe synthetic gemstones in the past, it would be the seller's obligation to ensure that claims about its products were truthful and not misleading. The seller also would be obliged to ensure that customers notice and understand qualifying information about products described in this manner. The opinion letter concluded that consumer survey evidence was necessary, and that advertisements and marketing material needed to be evaluated in order to determine whether the term "cultured," when describing synthetic diamonds, adequately qualifies the word "diamond," or whether the term as a whole is instead deceptive. 49

#### VII. The Current Petition and the Need for an Amendment to the Guides.

Since the FTC last considered this issue as part of its review of the Guides and in the context of a staff opinion, the JVC has obtained consumer perception data, described above, which indicates that the term "cultured" is misleading when used with synthetic products. This evidence and the recent growth in this market make full FTC consideration of the issue now even more imperative. It is important to note that neither the JVC nor any of the other associations are requesting that the FTC bring law enforcement actions to address this situation at this time. In

 <sup>45</sup> See Part IV, supra.
 46 J. Sperano, Letter from Jewelers Vigilance Committee to Bureau of Consumer Protection, FTC, July 18, 2001.

<sup>&</sup>lt;sup>47</sup> R. Spector, Letter from the Division of Enforcement, Bureau of Consumer Protection, FTC, to Jewelers Vigilance Committee, Oct. 3, 2001.

<sup>&</sup>lt;sup>48</sup> Id. See also L. DeMartino letter from the Division of Enforcement, Bureau of Consumer Protection, FTC, May

<sup>&</sup>lt;sup>49</sup> R. Spector, Letter from the Division of Enforcement, Bureau of Consumer Protection, FTC, to Jewelers Vigilance Committee, Oct. 3, 2001.

addition, neither the JVC nor any of the undersigned associations have any intent to restrict the sale or marketing of laboratory-created diamonds. This Petition merely asks the FTC to expand the guidance on nomenclature that it already provides in the Guides about practices that are unfair or deceptive when marketing synthetic products. Although representing, directly or by implication, that synthetic diamonds are comparable, contrary to fact, to cultured pearls in terms of their "production," "preparation," and the "manufacturing" process used and that they have the same type of "value" as cultured pearls may already be actionable as unfair or deceptive claims under § 23.1, the JVC and the supporters of the Petition believe that *specific* Commission guidance on the use of the term "cultured" is needed.

Specifically, we propose that the Commission amend § 23.24 of the Guides to include misuse of the word "cultured." This section already states that it is unfair or deceptive to use the word "natural" to describe synthetic or imitation products. Because the survey results show that consumers overwhelmingly interpret "cultured" to mean a "natural" product or a product grown naturally, it is appropriate and logical to revise this section to include the related word "cultured." The practical effect of this amendment would be to limit the use of the term "cultured" to pearls, as set forth in § 23.18(b).

Additionally, in considering this issue it is important to recall that the Commission has already determined that "cultured" and "synthetic" are *not* interchangeable terms. In its review of the Guides in 1996, the FTC specifically addressed the difference between a synthetic product and a cultured pearl. The FTC explained that the term "synthetic" may be used to describe laboratory-created stones only if they have "essentially the same optical, physical, and chemical properties as the stone named." Because cultured pearls do not have the same physical and optical properties as natural pearls, the FTC concluded that it would be deceptive to use the term "synthetic" for "cultured pearls." The reverse also should be true. The proposed amendments would inform the industry that the FTC considers the use of the term "cultured," a unique natural

<sup>&</sup>lt;sup>50</sup> We recommend amending the title of this section to include the word "Cultured," and to further amend the section as follows:

It is unfair or deceptive to use the word "real," "genuine," "natural," "cultured," "precious," "semi-precious" or similar terms to describe any industry product that is manufactured or produced artificially, except as provided for cultured pearls in §§ 23.19 and 23.20.

<sup>&</sup>lt;sup>51</sup> See also Commission Advisory Opinion at n. 44, supra.

and organic process long associated exclusively with the pearl industry, deceptive when used in conjunction with products created in an entirely dissimilar way.

## A. Deception Analysis.

In determining whether marketing is deceptive, the Commission analyzes whether there is a representation, omission or practice that is likely to mislead a consumer acting reasonably under the circumstances to his detriment. The JVC believes that current marketing materials disseminated by synthetic diamond manufacturers contain statements that are likely to mislead consumers to their detriment. Specifically, as described above, marketing materials for these products use the term "cultured" in a variety of ways that imply that synthetic diamonds are comparable to cultured pearls in terms of how they are produced and in other ways.

The results of the consumer surveys regarding consumer understanding of the term "cultured" support the conclusion that these uses of the term are misleading. No specific ads were copy tested because there is no intent to single out any marketer. Instead the research assesses how the term is understood by consumers and thus the likely impact of the use of the term in advertising generally. This is the type of data the Commission has used before when issuing guidance to the public.<sup>53</sup> These data evidence the need for Commission action to assist marketers by providing additional guidance on how to nondeceptively market lab-grown products.<sup>54</sup>

These data show that over forty percent (40%) of consumers understand "cultured" to refer to a natural process involving human intervention, which is not the process that is used to manufacture synthetic products (*see* Part III). Additionally, a large majority of respondents to the October 2005 survey did not have an accurate understanding of the term "cultured" when used in the phrase "cultured diamonds." These respondents either stated that they didn't know what "cultured diamonds" are, or incorrectly described the nature and/or provenance of "cultured"

<sup>&</sup>lt;sup>52</sup> Deception Policy Statement, appended to *Cliffdale Associates, Inc.*, 103 F.T.C. 110, 174 (1984).

<sup>53</sup> See Part V, nn. 26 and 27 and surrounding text.

<sup>&</sup>lt;sup>54</sup> The Commission's staff have advised other agencies, such as FDA, to provide guidance on terminology such as "100 whole grain" and "whole grain" so that marketers can use the terms without misleading consumers. *See* FTC comment to FDA in Docket No. 2006-0066, at n. 27, *supra. See also* FTC staff comments for Department of the Treasury on "Labeling and Advertising of Wines, Distilled Spirits and Malt Beverages" (recommending, *e.g.*, standardization of terms such as "drink" because of the wide variety of alcohol levels in various beverages) (Sept. 26, 2005).

diamonds." In fact, over one-in-four respondents believed that "cultured diamonds" are natural products. The results from the June 2006 survey are even more probative. Specifically, the study showed forty-one percent (41%) of respondents believed that "cultured diamonds" are a natural product. Thus, the empirical data regarding the term "cultured" when applied to a lab-grown diamonds indicate that its use in marketing is likely to mislead consumers about the nature, characteristics and value of the product, while a term, such as "synthetic," accurately conveys the nature of the product. <sup>55</sup>

Even if marketing for a lab-grown product were to also describe the product as "synthetic" or "created," or otherwise mention a manufacturing process, the use of the term "cultured" is highly likely, at a minimum, to introduce ambiguity about the nature of the process used to create the product. This ambiguity is likely to mislead consumers to their detriment, as the Commission previously determined in the Chatham case. 56 The Guides also recognize in § 23.1, note 2, that to prevent deception clear language is necessary for any disclosures and qualifications that may be necessary, as well as an absence of *contrary* claims that could undercut the effectiveness of any disclosures. Thus, even if marketing for synthetic diamonds stated, for example, that they were synthetic, created, or lab-grown, the use of the term "cultured" in the same marketing materials is a contrary claim. The very powerful associations created by the term "cultured" are very likely to overcome the other descriptors and to create a contrary impression or to create a misleading, deceptive ambiguity about the nature of the product. Under the proposed revision marketers of synthetic diamonds or other gemstones could continue to use the following terms, "synthetic," "laboratory-grown," "laboratory created, {manufacturer-name}-created, or "artificial," which the Commission has already determined are clear and unambiguous disclosures that the products are not natural stones. Similarly, the terms "man-made" and "machine-made," which unambiguously convey the origin of the product could be used.

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<sup>&</sup>lt;sup>55</sup> See Question 7 of July 2002 survey data.

<sup>&</sup>lt;sup>56</sup> See discussion of Chatham at n. 41. Although the Commission focuses on the "net impression" of advertising rather than the individual pieces of an advertisement, the Chatham case makes clear that the use of a term such as "cultured" by itself to describe a synthetic product is a false statement that cannot be cured by other statements in the ads. Additionally the use of the term may introduce so much ambiguity into the ad that other statements that may be non-deceptive on their own are now called into question, leaving the consumer with a misleading impression.

In any event, appropriate disclosure pre-sale is necessary to avoid harm to consumers. If consumers are misled about the nature of a product, they are deprived of the opportunity to make informed choices, including whether or not to buy a lab-grown versus a natural stone or what price to pay. The data indicate that consumers are willing to pay more for products that are created by a generally natural process than they are for synthetic products. Thus, adequate, appropriate and unambiguous disclosure about the fact that a product is synthetic and not natural is crucial.

Additionally, Commission guidance is likely to ensure that the product category is nondeceptively marketed at all levels of the trade, including at resale where original marketing materials or other information about the manufacture of the product may not be available. It also is not improbable that retailers may be confused about the nature of such products too.<sup>57</sup> With two market-place levels vulnerable to confusion, a scenario in which a retailer mistakenly sells a laboratory-created diamond to the ultimate consumer as a natural diamond is not unrealistic. This points to the need for adequate and clear disclosure of the nature and provenance of synthetic diamonds and gemstones in all contexts.

In short, amending the Guides as requested will encourage an environment of non-misleading advertising that does not obscure the nature of these products. It is particularly important that representations about these products be truthful and nonmisleading because most jewelers in the United States do not have specialized equipment on hand to identify synthetic diamonds from natural ones. This equipment is typically available at independent gemological facilities (not retail jewelry stores) with the appropriate resources.<sup>58</sup>

## B. The Unfairness Analysis.

In determining whether a practice is unfair under the FTC Act, the Commission analyzes whether there is an act or practice that causes, or is likely to cause, substantial injury to

<sup>&</sup>lt;sup>57</sup> This potential for confusion has been acknowledged by producers of synthetic gemstones. For example, Gemesis is adding tiny nickel particles to the production process in order to make it easier for laboratories to identify the nature of the stones. In addition, all synthetic diamonds weighing 0.25 carats or more have a unique serial number, bearing a laser inscription as to the Gemesis-origin of the stone on the girdle of the synthetic diamond. *See* http://moneycentral.msn.com/content/SavingandDebt/P97816.asp, "*Man-Made Diamonds: A Girl's New Best Friend?*" Jennifer Mulrean. It is not clear how consistently such efforts will be applied on a voluntary basis, or the degree to which they will benefit the ultimate consumer. Further, such techniques can be contravened. <sup>58</sup> *See Diamonds: Made In the U.S.A.*, CBS NEWS, May 12, 2004, at

http://www.cbsnews.com/stories/2004/05/10/60II/main616666.shtml.

consumers that is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or competition.<sup>59</sup>

In this regard, the research indicates that marketing for synthetic diamonds that invokes a connection between the process for creating cultured pearls and the ones used for creating synthetic diamonds or that likens a laboratory or factory-production setting to the process for culturing pearls in natural settings is likely to cause considerable consumer injury. Marketers that evoke imagery of the organic process used for cultured pearl production, or the positive reputation attributed to cultured pearls, would benefit from consumers pre-existing beliefs, to consumers' detriment. In essence, such marketing practices impute consumers' existing beliefs about cultured pearls and the high regard consumers have for such products to markedly different products.<sup>60</sup> Specifically, the consumer survey results show that consumers place a higher value on cultured diamond jewelry than on synthetic diamond jewelry and are willing to pay more for cultured jewelry than synthetic jewelry.

Thus, consumers are likely to be substantially injured economically from a practice of using "cultured" in marketing because of their preexisting beliefs about "culturing" that make them willing to pay more for such products. Consumers cannot avoid such harm because most consumers do not know (as shown by the survey data) what cultured diamonds are or that the processes used to create synthetic products are dramatically different from those used for cultured pearls. A practice of invoking consumers' positive views about cultured products for the purpose of transferring those beliefs to entirely different products does not have offsetting benefits to consumers or competition. Sellers of synthetic diamonds have many truthful and laudatory statements at their disposal to market their products and thus competition and the benefits that competition brings to consumers is not affected by a restriction on one unfair marketing term.

#### C. Other Equitable Considerations.

Another consequence of a long-term misuse of the term "cultured" in connection with synthetic diamonds may be to alter consumers' understanding of the term as it applies to pearls. The cultured pearl industry has dedicated enormous resources over many decades to help

 <sup>59 15</sup> U.S.C. § 45(n).
 60 See Telebrands, n. 25, supra.

consumers understand that the process by which cultured pearls are grown is largely a natural one. Consumer regard for such natural processes results in consumers valuing cultured pearls greater than synthetic products. These efforts to truthfully inform and educate consumers about the cultured pearl process could be undermined by allowing the term "cultured" to be applied to synthetic products. Specifically, such inappropriate and misleading use might lead to an erroneous consumer belief that a "cultured pearl" is a synthetic product. As noted previously, the Commission has already indicated that cultured pearls should not be marketed as "synthetic" products because they do not have "essentially the same optical, physical, and chemical" properties as natural pearls. Thus, the Commission should take action to also help ensure that consumers are not inadvertently misled about the nature of cultured pearls. Allowing the terms to be used interchangeably would create, in essence, exactly the kind of consumer confusion and deception that the Guides attempt to prevent.

Moreover, allowing the synthetic diamond industry to apply the term "cultured" to their products may set a dangerous precedent for other industry segments that may also seek to benefit from a lack of awareness among consumers. For example, if the laboratory-created diamond industry is permitted to describe its products as cultured, the simulated diamond industry may similarly feel that it is permissible for them to use the term "cultured" to describe its products. Companies that are now using the terms such as "cubic zirconia," "moissanite," "synthetic rutile," and "YAG" may come to believe that it is appropriate to call their products "cultured diamonds." Clearly, this would adversely affect consumers. It is therefore imperative that the FTC act now to highlight the importance of clear and accurate language in describing all jewelry products.

## VIII. <u>Harmonization with Other Countries, International Standards-Setting Bodies and Other Respected Bodies.</u>

The Commission has long been aware of the need for and the benefits of harmonizing regulatory requirements, when possible, with those in other countries and with best practices established by reputable standards-setting organizations.<sup>62</sup> As a result, a number of FTC

<sup>61 16</sup> C.F.R. § 23.21(d).

<sup>&</sup>lt;sup>62</sup> The Trade Agreements Act of 1979 states that no federal agency "may engage in standards-related activity that creates unnecessary obstacles to the foreign commerce of the United States and that federal agencies must, in developing standards, "take into consideration international standards and shall, if appropriate, base the standards on

regulations incorporate or reflect standards used in other countries or standards issued by the International Organization for Standardization ("ISO"). 63 In the jewelry industry, the Commission has reflected this view through, for example, its consideration of ISO standards for gold plating and platinum when it reviewed the Guides and its incorporation of certain ISObased standards into the Guides.<sup>64</sup> With respect to the term "cultured," internationally there is a strong movement towards restricting use of the term to cultured pearls, and Commission action to amend the Guides as proposed would be consistent with the actions of other governments and other highly regarded international and domestic organizations.

#### A. Actions by Foreign Countries.

In August 2005, the Australian Competition & Consumer Commission ("ACCC") published a Guide to the Trade Practices Act for Advertising and Promotion in the Jewelry Industry. The Deputy Chair of the ACCC announced when the guides were issued that they were designed to give the jewelry industry the basic information they need to comply with the Trade Practices Act and similar provisions in state and territory fair trading legislation. These guides expressly advise the jewelry industry that the use of the term "cultured" to describe laboratory-made gemstones risks being misleading and deceptive because "it may be inferred from the word 'cultured' that the gemstone has been produced from a predominantly organic process."65

Similarly, in 2002, the French government issued Decree No. 2002-65. This decree requires that the term "synthetic" be used when describing a laboratory-created gemstone, and

international standards." 19 U.S.C. § 2532(2)(A). A "standard" is defined as "a document approved by a recognized body that provides, for common and repeated use, rules, guidelines, or characteristics for products or related processes and product methods, with which compliance is not mandatory. Such term may also include or deal exclusively with terminology, symbols, packaging, marking, or labeling requirements as they apply to a product,

process, or production method." 19 U.S.C. § 2571(13).

63 See, e.g., Textile Act regulations at 16 C.F.R. Part 303 at § 303.7 (Generic names and definitions for manufactured fibers; ISO-approved generic names permitted); Care Labeling Rule, 16 C.F.R. Part 423 (symbols permitted in lieu of words to present care instructions to ease burden on international commerce; permitted symbols based on ISO symbols). See also Appliance Labeling Rule, 16 C.F.R. Part 305 at § 305.11 (a)(5)(i)(K) (allowing Canadian and Mexican Energy labels to be adjacent to U.S. EnergyGuide).

<sup>&</sup>lt;sup>64</sup> See 61 Fed. Reg. at 27188 (gold plating) and 62 Fed. Reg. 16669 (April 8, 1997) (platinum products) (FTC Press Release dated April 7, 1997 states "FTC Revises Guide For Platinum Jewelry Marketing: New Guide Simpler, Better Reflects International Standards, Agency Says").

<sup>&</sup>lt;sup>65</sup> A Guide to the Trade Practice Act: Advertising and Promotion in the Jewelry Industry, AUSTRALIAN COMPETITION & CONSUMER COMMISSION (Aug. 2005) at 17-18.

expressly prohibits the use of the term "cultured" (and the terms, "grown," "cultivated," and "natural") to describe synthetic stones. <sup>66</sup>

Also of interest is decision from a court in Germany involving the company Gemsmart GmbH, the German distributor of Gemesis diamonds. In that case, the court ordered that Gemsmart cease using the word "zuchtdiamond," which translates to "cultured diamond," when marketing its product in Germany.<sup>67</sup>

## B. <u>International Standards-Setting Decisions.</u>

The prestigious World Jewelry Confederation, also known as "CIBJO," also has addressed the issue of nomenclature for synthetic diamonds. CIBJO is a confederation of dozens of international jewelry associations representing all sectors of the international jewelry industry, including manufacturers, retailers, diamond dealers, colored gemstone dealers, mining organizations (precious metals and gemstones), gemological laboratories, and more. CIBJO is a member of the UN Economic and Social Council ("ECSOC"), a UN-based gathering of approved trade associations with which the UN consults on matters pertaining to international trade. CIBJO develops and publishes nomenclature standards applicable to jewelry products as its member associations reach consensus on standards. These standards are then published in the CIBJO "Blue Book," widely regarded as the most comprehensive guide to nomenclature in the international jewelry industry. To the extent that these standards are consistent with each member's national laws, members of CIBJO agree to apply these standards to their trade practices. In fact, some nations have adopted CIBJO standards into their respective legal systems.

The CIBJO Diamond Book is one portion of the Blue Book. It sets nomenclature standards specific to the diamond trade. Among the standards included in the Diamond Book is a provision that laboratory-created diamonds can only be described as "diamonds" if the phrase is immediately preceded by the terms "synthetic" or "artificial." Furthermore, the 2006 Blue Book explicitly states that the designation "cultured" is not an acceptable description of

<sup>&</sup>lt;sup>66</sup> See http://www.legifrance.gouv.fr/WAspad/UnTexteDeJorf?numbjo=ECOC0100138D.

<sup>&</sup>lt;sup>67</sup> Landgericht Muenchen I (Regional Court for Munich I), 1. Handelskammer (First Chamber of Commerce), Case Number 1HK O 9640/04.

<sup>&</sup>lt;sup>68</sup> The CIBJO Blue Book essentially is the international voluntary equivalent to the FTC Guides for the United States jewelry industry.

laboratory-created diamonds, as it is not an adequate or accurate description of the product. In a similar vein, another section of the Blue Book, the CIBJO Pearl Book, specifically states that the term "cultured" should only be applied to pearls.

## C. Other Organizations' Best Practices Determinations.

Other leading jewelry organizations also have considered what terminology is appropriate for describing synthetic diamonds. Most recently the World Diamond Congress, which is the official forum of the general assemblies of two of the most influential diamond industry groups, the World Federation of Diamond Bourses and the International Diamond Manufacturers Association, addressed this issue. At its June 2006 conference in Tel Aviv, the 32<sup>nd</sup> World Diamond Congress passed a resolution stating that only the term "synthetic diamond" should be used for laboratory produced diamonds.

This issue also has been addressed domestically by the highly regarded Gemological Institute of America ("GIA"). This group maintains the leading gemological research facility in the U.S. It also provides laboratory reports on diamond characteristics and quality. Further, its educational institute has trained thousands of gemologists who practice around the world. In June 2006, after extensive consultation with every sector of the diamond industry, GIA announced that it would grade laboratory-created diamonds (previously GIA only graded natural gemstones). In its announcement, the GIA stated, however, that it would only use the term "synthetic" to describe these products in its grading reports.

In sum, the U.S. and international jewelry community have reached a general consensus that the use of the term "cultured" when applied to synthetic diamonds is misleading and confusing. To avoid contradictory and confusing business practices, and to promote consistent and harmonious standards that ensure that U.S. consumers are as equally protected from misleading terminology as consumers elsewhere, the FTC should amend the Guides as requested.

## IX. Conclusion.

The evidence shows that the designation "cultured diamond" tends to confuse and mislead U.S. consumers about the nature of the product. Consumers mistakenly believe that cultured diamonds are created by a process that is similar to the process that creates cultured pearls – in essence, that they are grown naturally, and with minimal human intervention. As

more and more laboratory-created diamonds are produced and sold every year, marketing that incorrectly calls synthetic diamonds, "cultured diamonds" or that otherwise likens the process of the creation of this product to the cultured pearl process is likely to cause even greater consumer confusion and harm to consumers.

In a time of fast-moving change and growth in the synthetic gemstone industry, it is imperative that today's jewelry consumer be fully informed regarding the origins and material properties of any synthetic diamonds and gemstones that they are considering purchasing. Requiring clear and unambiguous terminology to describe the true nature of all jewelry products is consistent with the expectations and best interests of consumers. Given the industry's ongoing efforts to achieve credibility and honesty in jewelry transactions, the industry's faith and reliance on the FTC Guides, and the importance of protecting consumers' interests as the synthetic gemstone industry sector grows, the proposed amendment is critical to protect consumers and to promote fair competition.

Respectfully submitted this December 11, 2006.

JEWELERS VIGILANCE COMMITTEE

J

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## Jewelers Vigilance Committee Semantic Analysis Study



Research Conducted 11 April 2002 – 19 April 2002

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## **Executive Summary**

The Jewelers Vigilance Committee (JVC) commissioned this study to assess consumer perceptions regarding terminology used by the jewelry trade in diamond and pearl products and product marketing.

The objectives for this study were:

- 1. To find out if the use of the word "cultured" in conjunction with the word "diamond," was deceptive for the consumer and created a mistaken impression and/or meaning.
- 2. To determine if the use of the word "cultured" in conjunction with the word "pearl" caused a change in perception of value of pearl products by consumers.
- 3. To understand if consumers perceived a difference between the words "cultured" and "cultivated" as related to the pearl products.
- 4. To find out about consumer awareness of JVC in general.

The study collected opinions from some 565 individual consumer respondents, nearly 72% of whom stated that they had purchased at least one diamond jewelry product in the past three years and nearly 40% of whom stated that they had purchased one piece of pearly jewelry in the past three years.

Results of the study show that respondents are confused about the meaning of the term "cultured diamond" and that there may exist a semantic comparison between the meaning of "cultured diamond" and "cultured pearl."

The majority of respondents believe a "cultured diamond" to be either "a gemstone grown naturally with human intervention" (41%) (similar to "cultured pearl") or "a gemstone grown in a laboratory using natural substances" (27%).

The term "cultured diamond" is clearly not communicating that the product is synthetic or artificial.

With regards to pearls and pearl jewelry the study shows respondents have a very clear understanding of the word "cultured" and make a distinction between the meanings of "cultured" and "cultivated." Additionally respondents have a strong sense of value differentiation and relative value between the different descriptive words. (see page 33, Q15).

There is very little awareness (either prompted or unprompted) of JVC as an organization that protects consumers against fraud in the jewelry industry (see page 32).

## Description of the Methodology and Sampling

The JVC research study was conducted using the MVI Marketing Ltd.'s Jewelry Consumer Opinion Council (JCOC). This approaches uses demographic sampling to gather respondent feedback to a questionnaire they complete via email.

The sample included men and women aged 21 years and older and resident in mainland USA. No other demographic quotas were applied.

Some 565 responses were received over an eight-day period form April 11- April 19, 2002. The respondents were skewed towards being female (83%), had a median age of 41 - 45 with 44% being college graduates. Respondents had a medium income of between \$35,000 and \$75,000.

The JCOC offered participation in a sweepstakes draw as an incentive to participation in the study.

The responses to demographic profile questions begin on page 33 of this report.

## **Analysis of Response to Questions**

## Question 1: Respondent Diamond Jewelry Purchasing Experience

How many pieces of fine diamond jewelry have you bought for yourself or for others in the past three (3) years?(select one only) -	Number of Respondents	Response Ratio
Total	565	100.0%
NONE	159	28.1%
ONE ONE	112	19,8%
TWO - THREE	199	35,2%
FOUR - SIX	62	11.0%
SEVEN OR MORE	33	5,8%

## Question 2: Respondent Diamond Jewelry Purchasing Outlet

Which of the following best describes the type of store from? (select one only) -		Number of Respondents	
	Total	565	100.0%
None, I don't ever buy fine diamond jevelry	<b>.</b>	48	8,5%
TV shopping channel (e.g. HSN, QVC)		26	4,6%
Local independent jevelry store		191	33,8%
National jewelry chain (e.g. Zales, Kays)		130	23.0%
Department store (e.g. JC Penney, Kohl's)		58	10.3%
Internet only retailer (e.g. ashford.com)		18	3,2%
Discount merchandise store (e.g Wal-Mart or K-Mart)		55	9.7%
Shopping dub (e.g. Costco or Sam's Club)		12	2.1%
Designer/local craftsman		27	4,8%

## Question 3: Respondent Diamond Jewelry Terminology Recall

Thinking about buying diamends or diamer hearing used in product advertising or product	nd jewelry, which of the following words do you recall seeing or notion? (Select all that apply) -	Number of Respondents	
	Total	565	100.0%
Natural		292	51.7%
Synthetic		217	38.4%
Cultured		204	36,1%
Authentic		297	52.6%
Real		273	48.3%
Created		135	23.9%
Man-made		171	30,3%
Laboratory created		179	31.7%
Enchanced		114	20,2%
Can't recall any of these words		87	15,4%
Other, please specify		19	3,4%

Thinking about buying diamonds or diamond jevelry hearing used in product advertising or promotion? (Supecify	, which of the following words do you recall seeing or Select all that apply) - [Open Ended] Other, please	Number of Respondents	
	Tota	19	100.0%
Certified, Appraised		1	5.3%
clarity		2	10.5%
colored		1	5,3%
Cooked, Indian Goods		1	5.3%
cubic zirconia		1	5.3%
Œ		1	5,3%
Diamonique (synthetic)	<b>0</b>	1	5.3%
flawless	<b>0</b>	1	5.3%
flawless, clarity, color, carrots		1	5,3%
Genuine		5	26.3%
neat treated	0	1	5,3%
The heard of "cultured pearls"; but not diamonds.	•	1	5.3%
radiated		1	5.3%
These words don"t seem to apply to diamonds		1	5,3%

# Questions 4-10: Respondent Understanding of Diamond Jewelry Terminology

believe would refer to "real diamonds." (Here we earth and untreated by man other than for cuttin	elry, which of the following product descriptions do you have defined "real diamonds" as those mined from the g and polishing). Select all that apply	Number of Respondents	Responsi Ratio
Diamond	Total	565	100.0%
Colored Diamond		373	66,0%
Genuine Diamond		164	29.0%
Gultured Diamond		521	92,2%
Synthetic Diamond		47	8,3%
Man-made Diamond		11	1,9%
		15	2,7%
aboratory Created Diamond		4	0.7%
nhanced Diamond		37	6,5%
mproved Diamond		14	2,5%
ynthetic Diamond	,		4 4 67

Please describe what the term "Genuine Diamond" means to you. (Select only one) -			Response Rátio
	Total	565	100.0%
A gemstone found naturally in the earth		491	86.9%
A gemstone created by man in a laboratory using natural substances		O	0.0%
A gemstone created by man in a laboratory using chemicals or artificial substances		0	0.0%
A gernstone found naturally in the earth but enhanced or improved by man using chemicals or artificial substances		44	7.8%
I don't understand what this term means		11	1,9%
A gemstone grown naturally with human intervention		12	2,1%
Other, please specify		7	1.2%

Please describe what the term "Genuine Diamond" me please specify		Number of Respondents	
	Total	7	100,0%
A natural gemstone in the earth which has been cut and polished by craftsmen		1	14.3%
could mean several of these terms	<u> </u>	i	14.3%
found and not messed with by man except cutting forsetting		1	14.3%
gemstone found naturally and cut by man		1	14.3%
naturally occuring but could be enhanced and still genuine		1	14.3%
that it is the chemical composition of a diamond(real or man-made)		i	14.3%
The real thing		1	14.3%

Please describe what the term "Enhanced Diamond" m		Number of Respondents	
	. Total	565	100.0%
A gemstone found naturally in the earth		4	0.7%
A gemstone created by man in a laboratory using natural substances		14	2,5%
A gemstone created by man in a laboratory using chemicals or artificial substances		30	5.3%
A gemstone found naturally in the earth but improved by man using chemicals or artificial substances		450	79.6%
I don't understand what this term means	0	25	4.4%
A gemstone grown naturally with human intervention	0	4 <b>0</b>	7,1%
Other, please specify	**************************************	2	0.4%

Please describe what the term "Enhanced Diamond" me Other, please specify:		Number of Respondents	Response Ratio
	Total	2	100,0%
a diamond found in the earth and irradiated or such for coloring		1	50.0%
a gemstone either found naturally in the earth but improved by man or grown naturally with human int		1	50.0%

Diagonal and the state of the s			
Please describe what the term "Synthetic Diamond" m	reans to you. (Select only one) -	Number of Respondents	
A gemstone found naturally in the earth	Total	565 2	100.0% 0.4%
A gemstone created by man in a laboratory using natural substances		123	21.8%
A gemstone created by man in a laboratory using chemicals or artificial substances		412	72.9%
A gemstone found naturally in the earth but enhanced or improved by man using chemicals or artificial substances	}	10	1.8%
I don't understand what this term means		7	1.2%
A gemstone grown naturally with human intervention		9	1,6%
Other, please specify		2	0.4%

Please describe what the term "Synthetic Diamond" means to you. (Select only one) - [Open Ended] Other, please specify	Number of Respondents	Response Ratio
A gemstone created in a laboratory	2	100,0%
not a diamond, C2 or something like it	1	50.0% 50,0%

Please describe what the term "Treated Diamond" me	ans to you, (Select only one) -	Number of Respondents	
A generators found naturally in the and	Total	565	100,0%
A gernstone found naturally in the earth		2	0.4%
A gernstone created by man in a laboratory using natural substances		25	4.4%
A gemstone created by man in a laboratory using chemicals or artificial substances	•	39	6.9%
A gemstone found naturally in the earth but enhanced or improved by man using chemicals or artificial substances		386	68.7%
I don't understand what this term means		60	10.6%
A gemstone grown naturally with human intervention		50	8.8%
Other, please specify		1	0.2%

Please describe what the term "Treated Diamond" means to you. (Select only one) - [Open Ended] Other,	Number of	Response
please specify	Respondents	
Total Control of the	1	100.0%
2, + or physical treatment such as heat	1	100.0%

		Number of Respondents	
A gemstone found naturally in the earth	. Total	565 18	100.0% 3.2%
A gemstone created by man in a laboratory using natural substances		146	25.8%
A gemstone created by man in a laboratory using chemicals or artificial substances	•	42	7.4%
A gemstone found naturally in the earth but enhanced or improved by man using chemicals or artificial substances		45	8.0%
I don't understand what this term means		80	14.2%
A gemstone grown naturally with human intervention		233	41.2%
Other, please specify		1	0.2%

Please describe what the term	"Cultured Diamond" mean	s to you. (Select only one)	- [Open Ended] Other,	Number of Response
please specify			<b>R</b>	espondents Ratio
			Total	1 100.0%
Same as "synthetic"				1 100.0%

Thinking about fine diamond jevelry, please tell us what you understand each of the words in the left hand column below to mean. Select all that apply, multiple choices are permitted Genuine	l Number of Respondents	Response Ratio
Total Natural	565 552	100.0% 97.7%
Laboratory Grown	3	0,5%
Artificially Created	4	0.7%
Artificially Improved	10	1.8%
Naturally Grown w/ Human Intervention	18	3,2%
Don't Knew	8	1.4%

Thinking about fine diamond jevelry, please tell us what you understand each of the words in the left hand column below to mean. Select all that apply, multiple choices are permitted Cultured	Number of Respondents	Response Ratio
Total	565	100,0%
Natural Laboratory Groyn	46 172	8,1% 30,4%
Artificially Created	73	12.9%
Artificially Improved	80	14,2%
Naturally Grown w/ Human Intervention	308	54.5%
Don't Knov	61	10.8%

Thinking about fine diamond jewelry, please tell us column below to mean. Select all that apply, multip	s what you understand each of the words in the left hand ble choices are permitted Synthetic	Number of Respondents	Response Ratio
	Total	565	100.0%
Natural	•	3	0.5%
Laboratory Grown		236	41.8%
Artificially Created		455	80,5%
Artificially Improved	0	42	7,4%
Naturally Grown w/ Human Intervention	•	16	2.8%
Don't Know		8	1,4%

Thinking about fine diamond jevelry, please tell a column below to mean. Select all that apply, mult	us what you understand each of the words in the left han tiple choices are permitted Treated	d Number of Respondents	Response Ratio
Natural	Tota	<b>l</b> 565 58	100.0% 10.3%
Laboratory Grown	0	27	4.8%
Artificially Created	0	20	3,5%
Artificially Improved		446	78,9%
Naturally Grown w/ Human Intervention		105	18.6%
Don't Know		34	6.0%

Thinking about fine diamond jevelry, please tell us what you understand each of the words in the left hand column below to mean. Select all that apply, multiple choices are permitted, - Enhanced	Number of Respondents	
Total Natural	<b>565</b> 60	100.0% 10.6%
Laboratory Grown	28	5,0%
Artificially Created	23	4.1%
Artificially Improved	398	70,4%
Vaturally Grown w/ Human Intervention	169	29,9%
Don't Know	27	4,8%

## Questions 11-12: Respondent Valuation of Diamond Jewelry Terminology

	:	
Thinking about diamonds and diamond jewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number 1 to represent your perception of the most valuable product and the number 5 to represent your perception of the least valuable Genuine	Number of Respondents	Response Ratio
Total	565	100.0%
2	8	91,5% 1,4%
3	1	0.2%
4	3	0.5%
5	23	4.1%
Don't Know	13	2.3%

would rank each of the followin number 1 to represent your pe	erception of the most valuable product and the number 5 to represent your	Number of Respondents	·
perception of the least valuable	lea- Cultured and a graph a		100.0%
1		11	1.9%
2		182	32,2%
3		126	22.3%
4		165	29.2%
5	0	30	5,3%
Don't Know		51	9,0%

Thinking about diamonds and diamond jewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number 1 to represent your perception of the most valuable product and the number 5 to represent your perception of the least valuable Synthetic	Number of Respondents	
Total	565	100.0%
1	17	3,0%
2	14	2,5%
3	30	5.3%
4	63	11.2%
5	420	74.3%
Don't Know	21	3.7%

Thinking about diamonds and diamond jewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number 1 to represent your perception of the most valuable product and the number 5 to represent your	Number of Respondents	Response Ratio
perception of the least valuable Treated  Total	565	100.0%
1	6	1,1%
2	73	12.9%
3	209	37.0%
4	206	36.5%
5	46	8.1%
Don't Know	25	4,4%

Thinking about diamonds and diamond jewelry and bas would rank each of the following words in terms of your number 1 to represent your perception of the most value perception of the least valuable Enhanced	perception of its product value. Please allow the	Number of Respondents	
	Total	565	100.0%
1		13	2.3%
2		237	41.9%
3		194	34,3%
4		82	14.5%
5	0	21	3.7%
Don't Know		18	3.2%

In each of the categories of diamond jevelry below, te or less compared to genuine diamond jevelry? - Synth	ll us if you would you expect to pay more, the same etic Diamond Jewelry	Number of Respondents	Response Ratio
More	Total	565 7	100,0% 1,2%
The Same		11	1.9%
Less		537	95.0%
Don't Know		10	1.8%

In each of the categories of diamond jevelry below, tell or less compared to genuine diamond jevelry? - Treated		Number of Respondents	Response Ratio
More	Total	<b>565</b> 38	100.0% 6.7%
The Same		114	20,2%
Less		384	68.0%
Don't Know		29	5,1%

In each of the categories of diamond jewelry below, tell us if you would you expect to pay more, the same or less compared to genuine diamond jewelry? • Cultured Diamond Jewelry	Number of	Response
Total	Keshouneur	400.000
More	24	4.2%
The Same	145	25.7%
Less	345	61.1%

In each of the categories of diamond jewelry below, tell us if you would you expect to pay more, the same or less compared to genuine diamond jewelry? - Authentic Diamond Jewelry	Number of Respondents	Response Ratio
Total	565	100.0%
More	196	34,7%
The Same	290	51.3%
Less	60	10.6%
Dan't Know	19	3,4%

In each of the categories of diamond jewelry below, to or less compared to genuine diamond jewelry? - Crea	ell us if you would you expect to pay more, the same ited Diamond Jevelry	Number of Respondents	Response Ratio
More	Total	565 8	100.0% 1.4%
The Same		42	7.4%
Less		502	88.8%
Don't Know		13	2.3%

In each of the categories of diamond jewelry below, tell us if you would you expect to pay more, the same or less compared to genuine diamond jewelry? - Enhanced Diamond Jewelry	Number of Respondents	Response Ratio
Total More	565 77	100,0% 13.6%
The Same	166	29,4%
Less	294	52.0%
Don't Know	28	5.0%

### Question 13: Respondent Pearl Jewelry Purchasing Experience

How many pieces of pearl jevelry have you bought for yourself or for (select one only)	Respondents	Response Ratio
NONE	<b>Total</b> 565 344	100.0% 60.9%
ONE (Market)	124	21,9%
TWO - THREE	74	13.1%
FOUR - SIX	18	3.2%
SEVEN OR MORE	5	0,9%

Question 14: Respondent Pearl Jewelry Purchasing Outlet

Which of the following best describes the type of store (select one only) -		Number of Respondents	12.0
	Total	565	100.0%
None, I don't ever buy pearl jewelry		176	31,2%
TV shopping channel (e.g. HSN, QVC)		26	4,6%
Local independent jewelry store		131	23.2%
National jewelry chain (e.g. Zales, Kays)		68	12.0%
Department store (e.g. JC Penney, Kohl's)		56	9,9%
Internet only retailer (e.g. ashford.com)	<u></u>	8	1,4%
Discount merchandise store (e.g Wal-Mart or K-Mart)		55	9,7%
Shopping club (e.g. Costco or Sam's Club)	\$ 000000000000000000000000000000000000	10	1.8%
Designer/local craftsman		35	6.2%

### Question 15: Respondent Valuation of Pearl Jewelry Terminology

Please choose how expensive you feel each category of pearl jewelry is as you understand them Cultured pearl jewelry	Number of Respondents	Response Ratio
Total	565	100.0%
Expensive	301	53,3%
Very Expensive	163	28.8%
Inexpensive	70	12,4%
Don't Know	31	5,5%

Please choose how expensive you feel each category of pearl jewelry is as you understand Cultivated pearl jewelry	them	Number of Respondents	Response Ratio
Expensive	Total	565 252	100.0% 44.6%
Very Expensive	······································	90	15.9%
Inexpensive		156	27.6%
Don't Know		67	11,9%

Please choose how expensive you fee pearl jewelry	el each category of pearl jewelry is as you understand them Natural Number of Respondents	Response Ratio
	Total 565	100.0%
Expensive	229	40.5%
Very Expensive	291	51.5%
Inexpensive	16	2,3%
Don't Know	29	5,1%

Please choose how expensive you feel each category of pearl jewelry is as you understand them Freshwater pearl jewelry	Number of Respondents	Response Ratio
Total Expensive	565 205	100.0% 36,3%
Very Expensive	130	23.0%
Inexpensive	195	34.5%
Don't Know	35	6,2%

Please choose how expensive you feel each category of Imitation pearl jewelry	gright for the thing of the	Number of Respondents	Response Ratio
Expensive	Total	565 4	100,0% 0,7%
Very Expensive		2	0.4%
Inexpensive Don't Know		537	95.0%

## Questions 16-21: True/False Valuation Statement

16		
Cultivated Pearls are more valuable than Cultured Pearls	Number of	Response
	Respondents	Ratio
Total	565	100,0%
True	134	23,7%
False	431	76.3%

Cultured Pearls are more valuable than Natural Pearls -	Number of	Response
kasan ne likawa makili kantari iliku makili kantari mana mana mana mali mana kili mana kali mana kili mana ka Kantari mili umija menggali mana mana mana mengali mengali mengali mana mengali mengali mengali mengali mengal	Respondents	Ratio
Total	565	100,0%
True	122	21,6%
False	443	78.4%

Cultivated Pearls are more valuable than Natural Pearls -	Number of	Response
	Respondents	Ratio
Total	565	100.0%
True ( )	57	10,1%
False	508	89.9%

Freshwater Cultured Pearls are more valuable than Freshwater Pearls -	Number of Resonndents	Response Ratio
Total	565	100.0%
True	163	28.8%
False	402	71.2%

28		
South Sea Cultured Pearls are more valuable than South Sea Pearls -	Number of	Response
	Respondents	Ratio
Total	565	100.0%
True	143	25,3%
False	422	74,7%

Black Cultured Pearls are more valuable than Black Pearls -	Number of Respondents	Response Ratio
Total	565	100.0%
True	146	25.8%
False	419	74.2%

## Question 22: Respondent Understanding of Pearl Jewelry Terminology

Thinking about pearls and pearl jevelry, please tell us what you understand e hand column below to mean. Select all that apply, multiple choices permitted,	ech of the words in the left Number of Natural Respondents	Response Ratio
Genuine ·	Total 565 529	100.0% 93.6%
Laboratory Grown	6	1,1%
Artificially Created	1	0.2%
Artificially Improved	3	0.5%
Naturally Grown v/Human Intervention	18	3,2%
Don't Know	21	3.7%

Thinking about pearls and pearl jewelry, please tell us what you understand each of the words in the left	Number of	Response
hand column below to mean. Select all that apply, multiple choices permitted Cultured	Respondents	Ratio
Tota	565	100,0%
Genuine	126	22.3%
Laboratory Grown	91	16,1%
Artificially Created	40	7.1%
Artificially Improved	59	10,4%
Naturally Grown w/Human Intervention	339	60.0%
Dan't Knoy	36	6,4%

Thinking about pearls and pearl jewelry, please tell us what you understand each of the words in the left	Number of	Response
hand column below to mean. Select all that apply, multiple choices permitted Cultivated	Respondents	Ratio
Total Genuine (Mariana)	565 79	100,0% 14,0%
Laboratory Grown	127	22.5%
Artificially Created	47	8,3%
Artificially Improved	66	11.7%
Naturally Grown w/Human Intervention	295	52.2%
Don't Know	57	10.1%

Februaries a section of the contraction of the first transfer of the contraction of the c		***************************************
Thinking about pearls and pearl jewelry, please tell us what you understand each of the words in the left hand column below to mean. Select all that apply, multiple choices permitted. • Treated	Number of Respondents	Response Ratio
Tota	565	100.0%
Genuine (Marie )	43	7.6%
Laboratory Grown	28	5,0%
Artificially Created	28	5.0%
Artificially Improved	422	74.7%
Naturally Grown w/Human Intervention	102	18.1%

Thinking about pearls and pearl jewelry, please nand column below to mean. Select all that app	e tell us what you understand each of the words in the left ply, multiple choices permitted Enhanced	Number of Respondents	Response Ratio
Senina	Total		100.0%
aboratory Grown	· ·	55 20	9.7% 3.5%
artificially Created		19	3.4%
irtifically Improved	20000000	408	72,2%
laturally Grown w/Human Intervention		122	21.6%

Thinking about pearls and pearl jewelry, please tell us what you understand each of the words in the hand column below to mean. Select all that apply, multiple choices permitted Imitation	left Number of Respondents	Response Ratio
Genuine	<b>Total</b> 565	100.0% 0.4%
Laboratory Grown	114	20,2%
Artificially Created	459	81,2%
Artificially Improved	36	6.4%
Naturally Grown w/Human Intervention	13	2.3%
Den't Knew	32	5.7%

Thinking about pearls and pearl jevelry, please hand column below to mean. Select all that app	tell us what you understand each of the words in the left ly, multiple choices permitted Created	Number of Respondents	Response Ratio
<b>G</b> eorgian	Total	565	100.0%
Laboratory Grown		5 237	0.9% 41.9%
Artificially Created		360	63,7%
Artificially Improved	<b></b>	30	5,3%
Naturally Grown w/Human Intervention		47	8,3%
COLL (VION		34	6,0%

Thinking about pearls and pearl jewelry, please tell us what you understand each of the words in the left hand column below to mean. Select all that apply, multiple choices permitted Authentic	Number of Respondents	Response Ratio
Total	565	100.0%
Genuine	509	90.1%
Laboratory Grown	8	1,4%
Artificially Created	4	0.7%
Artificially Improved	8	1,4%
Naturally Grown w/Hurnan Intervention	23	4.1%
Don't Know	37	6,5%

## Question 23: Additional Respondent Valuation of Pearl Jewelry Terminology

Thinking about pearls and pearl jevelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number 1 to represent your perception of the most valuable product and the number 8 to represent your perception of the least valuable Cultured	Number of Respondents	Response Ratio
Total	565	100.0%
	121	21.4%
2	128	22.7%
3	139	24.5%
4	67	11.9%
5	47	8,3%
6	22	3,9%
7	4	0.7%
8	2	0.4%
Don't Knov	35	6.2%

Thinking about pearls and pearl jewelry and based on your unders rank each of the following words in terms of your perception of its 1 to represent your perception of the most valuable product and the perception of the least valuable Treated	product value. Please allow the number Respondents	Response Ratio
	Total 565	100.0%
1	. 2	0.4%
2	25	4,4%
3	91	16,1%
4	120	21.2%
5	111	19.6%
6	112	19,8%
7	34	6.0%
8	15	2,7%
Don't Knov	55	9,7%

	:	
Thinking about pearls and pearl jewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number	Number of Respondents	Response Ratio
1 to represent your perception of the most valuable product and the number 8 to represent your perception of the least valuable Enhanced		31.
Total	565	100.0%
<u>1</u> .	3	0.5%
2	44	7.8%
3	115	20.4%
4	129	22.8%
5	132	23,4%
6	60	10.6%
7	23	4.1%
8	9	1.6%
Don't Know	50	8.8%

Thinking about pearls and pearl jewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number	Number of r Respondents	Response Ratio
1 to represent your perception of the most valuable product and the number 8 to represent your perception of the least valuable Natural		
Tot	al 565	100.0%
1	371	65.7%
2	105	18.6%
3	36	6,4%
4	9	1.6%
5	4	0.7%
6	3	0,5%
7	4	0.7%
8	4	0.7%
Don't Know	29	5,1%

Thinking about pearls and pearl sewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number	Number of Respondents	Response Ratio
1 to represent your perception of the most valuable product and the number 8 to represent your perception of the least valuable Cultivated		
Total	565	100.0%
1	22	3,9%
2	78	13,9%
3	109	19.3%
4	118	20,9%
5	81	14.3%
5	83	14.7%
7	17	3.0%
8	8	1.4%
Don't Knew	49	8.7%

Thinking about pearls and pearl jewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number 1 to represent your perception of the most valuable product and the number 8 to represent your perception of the least valuable Imitation	Number of Respondents	Response Ratio
Total	565	100.0%
1	6	1.1%
2	3	0,5%
3	1	0,2%
4	8	1.4%
5	18	3,2%
6	30	5,3%
7	53	9.4%
8	412	72,9%
Don't Know	34	6,0%

Thinking about pearls and pearl jewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number 1 to represent your perception of the most valuable product and the number 8 to represent your perception of the least valuable Created	Number of Respondents	
Tota	565	100.0%
1	4	0.7%
2	10	1.8%
3	9	1.6%
4	47	8.3%
5	56	9.9%
6	78	13.8%
7	223	39,5%
8	88	15.6%
Don't Know	50	8,8%

Thinking about pearls and pearl jewelry and based on your understanding, please tell us how you would rank each of the following words in terms of your perception of its product value. Please allow the number 1 to represent your perception of the most valuable product and the number 8 to represent your perception of the least valuable Authentic	Number of Respondents	Response Ratio
Total	565	100.0%
1	290	51.3%
2	146	25.8%
3	29	5.1%
4	20	3,5%
5	8	1,4%
6	14	2.5%
7	10	1.8%
8	8	1.4%
Don't Know	40	7,1%

## Question 24: Unprompted Awareness of Jewelers Vigilance Committee

Pan you hame any organization in the USA that prote ewelry industry? (If not please dick Continue) [Ope	cts consumers egainst fraud and deception in the n Ended] Enter organization name here:	Number of Respondents	
	Total	·	120.69
IGA		2	1.6%
GI			1.8%
merican gem society		i	0.5%
merican gemolical society	eda Oriellereme a arri	12 x 12 x 12 x 12 x 12	0.99
merican Gemological Institute?	•••••••••••••••••••••••••••••••••••••••	<u> </u>	
	···		0.3%
rnerican Jewelers Society		. 1	0.99
.8.8.		1	0,93
bb		14	12.59
8B,Attorney General		1	0.99
eter Business Bureau	······································	1	0.59
ETTER BUSINESS Bureau		ī	0.99
etter Business Buereu	•••••••••••••••••••••••••••••••••••••••		0.59
etter business bureau		.ii.	\$
		12	10.7%
etter Business Bureau (not specific,but)	: 	1	0.39
etter Business Bureau, National Jewelry Council		1	0.99
etter Business Bureau?	· · · · · · · · · · · · · · · · · · ·	1	0.93
ureau of Consumer Affairs?	:	1	0.99
ertified Gemoligist		1	0.99
onsumer	······································	1	0.59
onsumer affairs	nijemera ini ka arran diriri iz iz za	1 · · · · ·	0.53
	- <del>!</del>	<u>†</u>	A
onsumer Counse!		.; 1	0,59
onsumer Protection Agency	.;	2	1.89
onsumer protection board		1	0.99
ontinue		1	0.99
Insumer product saftey commission	**************************************	1	0,99
ept of consumer affairs		1.	0.99
	A TOTAL A STATE OF THE A STATE OF THE STATE	A CONTRACT OF THE RESERVE	
amond Institute of America		1	0.99
o not know of any such organization		1	0.39
on		1	0.99
on"t know	•	1	0.93
om		1	0.99
VA	······································		0.99
T C	<u>,                                    </u>	1	0.59
1			0.99
······································		<u>.</u>	
deral Trade commission or attorney general	<u> </u>		0.93
ic .	<u>;</u>	<u> </u>	0.99
emological Institut of America		1	0.99
emological Institute of America		2	1.69
IA	*****	: 5	4,5%
A?	:	1.	0.53
(A)	KEIH DYE HEIT '		0.99
······································		1	
ive no due			0.99
rave no idea	!	1	0.99
personally don"t know of any		1.	0.93
A	:	1	0.99
ternational Gemological Institute	;	1	0.99
welers Board of trade	· · · · · · · · · · · · · · · · · · ·	1	0.99
velry consumer protection agency	Minimum tim h K		0.99
	·	1	0.99
welry Council			
dicial System		<u> </u>	0.99
0		1	0.99
š		1	0.99
	1	1	0.91
tional association of gemologist	·		0.99
	. <del> </del>	1	0.99
onal diamond exchange	<u> </u>		
			0.99
	100°	; 1	0.59
ional Gernologists Assoc?	•	1	0.99
ional Gernologists Assoc?			0.99
ional Gemologists Assoc? ional Jeweler's Association			
donal Gernologists Assoc? donal Jeweler's Association donal Jewlry federation and gems		1	
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Bonal Gemologists Assoc? tional Jeweler''s Association tional Jewlry federation and gems L Idea !		1 1 11 1	0.99 9.89 0.99
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Gonal Gernologists Assoc? tional Jeweler's Association tional Jewlry federation and gems L Idea! Idea!		1 1 11 1 1 2	0.99 9.89 0.99 0.99
tional Gemologists Assoc? tional Jeweler's Association tional Jewlry federation and gems L Idea ! n e ne		1 11 1 1 1 2	0.99 9.89 0.99 0.99 1.89
tional Gernologists Assoc?  tional Jeweler's Association  tional Jewlry federation and gems L  Idea ! n e he t sure.		1 1 11 1 1 2 1	0.99 9.89 0.99 0.99 1.89 0.99
tional Gemological Society, National Gold Council tional Gemologists Assoc? tional Jeweler's Association tional Jeweler's Association tional Jewlry federation and gems L Idea! Idea! Idea! Idea! Is e In		1 11 1 1 1 2	0.39 9.89 0.99 1.89 0.99 0.99 0.99

### Question 25: Prompted Awareness of Jewelers Vigilance Committee

	Have you ever heard of an organization called the Jewelers Vigilance Committee (JVC), which protects consumers against fraud and deception in the jewelry industry? -	Number of	Response
	Total	nespundents 566	100.0%
	Yes	18	3,2%
***************************************	No	548	96,8%

## Question 26: Respondent Gender

***************************************	16		
***************************************	What is your gender?	Number of Respondents	Response Ratio
	Total	566	100.0%
	Female Familia Company	93 473	16.4% 83.6%

### Question 27: Respondent Age

What is your current ag	ge? (selectione only):- Respondents	Respons Ratio
	Total 566	100,0%
21 - 25	31	5.5%
26 - 30	53	9,4%
31 - 35	. 78	13,8%
36 - 40	73	12,9%
41 - 45	109	19.3%
46 - 50	92	16.3%
51 - 55	57	10,1%
56 - 60	42	7,4%
61 - 65	18	3,2%
66 and over	12	2 500

## Question 28: Respondent Education

What is the highest level of education you have attained? (select one only) -	Number of Respondents	Response Ratio
Tota High School Graduate	566 99	100.0% 17.5%
Some College	219	38,7%
College Graduate	165	29,2%
Post Graduate	83	14,7%

Question 29: Respondent Household Income Level

What is you current household income? (select	(A) (A)	Number of Respondents	
	Total	566	100,0%
\$0 - <b>\$</b> 25,000		69	12,2%
\$25,001 - \$35,000		71	12,5%
\$35,001 - \$55,000		132	23,3%
\$55,001 - \$75,000		102	18,0%
;75,001 - \$100,00 <u>0</u>		71	12,5%
100,001 - \$125,000	O	34	6,0%
125,001 - \$150,000		17	3,0%
150,001 - \$200,000		10	1,8%
200,001 - \$250,000		i	0,2%
250,001 - \$300,000		1	0.2%
over \$300,000		5	0.9%
ecline to answer		53	9,4%

## Question 30: Respondent State of Residence

Please select the State in which you live [Open Ended] State	Number of Respondents	Respon Ratio
Tota	l 567	100.0%
AL .	9	1.4%
AR .	6	1.1%
<b>\</b> Z	9	1.6%
GA CONTRACTOR OF THE CONTRACTO	71	12,5%
00	6	1,1%
T	9	1.6%
DC	2	0.4%
)E		C.4%
L	2	
A-14-14-14-14-14-14-14-14-14-14-14-14-14-	33	5,8%
6A	8	1.49
A	7	1.29
D	2	0,49
L	27	4.89
N .	10	1.89
S	8	1.49
Y	9	1,69
A Î	6	1.19
1A : (a)	18	3,29
ID	11	1.99
1E	3	0.59
YI		2,19
	12	***************
	13	2,39
10	12	2.19
	2	0,49
T	3	0.59
C	16	2.89
D	1	0.29
E	4	G.79
H	4	0.79
	16	2.89
M .	3	0.59
V	5	0.99
Y	44	7.89
· · · · · · · · · · · · · · · · · · ·	and the same and a same of the same of the same	5.39
H	30	:
K .	6	1.19
R	9	1.69
<u> </u>	24	4,29
	1	0.29
	7	1.29
	2	0.49
1	11	1.99
\(\text{\cong}\)	43	7.69
F	3	0.59
	12	2.19
	1	0.29
A	13	2,39
	12	2.19
V	3	0.5

# **Significant Cross Tabulations**

Please describe what the term 'Cultured Dia	1103411						
		How many pieces of fine diamond jewelry have you bought for yourself or for others in the past three (3) years?(select one only) -					
	TOTAL	BASE	NONE	ONE	TWO - THREE	FOUR - SIX	SEVEN OR More
Count Calumn%	567 100.0%		160 100,0%	1 11 11 11 11 11 11	*	62 100,0%	34 100,0%
A gemstone found naturally in the earth	18 3,2%		9 5.6%	0 0.0%	6 3.0%	3 4.8%	0.0%
A gemstone created by man in a laboratory using natural substances		1: 1: 1: 1 1 1 1 1	45 28.1%	:		10 16,1%	3 8,8%
A gemstone created by man in a laboratory using chemicals or artificial substances		42 7.4%	13 8.1%	- 1	19 9.5%	3 4.8%	2 5.9%
A gemstone found naturally in the earth but enhanced or improved by man using chemicals or artificial substances	45	45 7.9%	11 6.9%	12 10.7%	16 8.0%	3 4.8%	3 8.8%
I don't understand what this term means	81 14.3%	81 14.3%	25 15.6%		25 12.6%	6 9.7%	7 20.6%
A gemstone grown naturally with human intervention	5 5 . 35 55 55	234 41,3%	56 35.0%	45 40.2%		37 59.7%	19 55.9%
Other, please specify	1 0,2%	1 0,2%	1 0.6%	0 0.0%	0 0.0%	0 0.0%	0 0.0%

Cultured Pea	rls are more valuable than Natural Pearls				
		What is your gender? -			
	TOTAĻ	BASE	Male	Female	
Count	567	567	93	474	
Column%	100.0%	100.0%	100.0%	100.0%	
True	122	122	17	105	
	21,5%	21,5%	18.3%	22.2%	
False	445	445	76	369	
	78,5%	78,5%	81.7%	77.8%	

	What is your gender? -				
	TOTAL	BASE	Male	Female	
Count	567	567	93	474	
Column%	100.0%	100,0%	100.0%	100.0%	
True	58	58	7	51	
	10,2%	10,2%	7.5%	10.8%	
False	509	509	86	423	
	89,8%	89,8%	92.5%	89,2%	

#### **MVI Recommendations and Conclusions**

Our conclusions based on the above detailed research and relating to the original objectives of the study are as follows:

1. To find out if the use of the word "cultured" in conjunction with the word "diamond," was deceptive for the consumer and created a mistaken impression and/or meaning.

Respondents to this study suggest significant confusion about this term and certainly give no indication that they believe the term to mean the diamonds are either synthetic or artificial.

2. To determine if the use of the word "cultured" in conjunction with the word "pearl" caused a change in perception of value of pearl products by consumers.

Respondents to this study have a good awareness of the use of the word "cultured" in conjunction with the word "pearl." It is MVI's belief that these two words have become generic as a description of the pearl product category.

Responses suggest that the use of the word "cultured" does not change respondent perception of pearl value.

Jewelry Consumer Opinion Council
Research Study
12 July 2002

3. To understand if consumers perceive a difference between the words "cultured" and "cultivated" as relates to the pearl products.

Responses suggest that respondents do perceive a slight difference between the words "cultured" and "cultivated" with the latter being less well known and perceived as less valuable.

To find out about consumer awareness of JVC in general.

There is little to no awareness of JVC among the respondents to this study.

#### Addendum

The Jewelry Consumer Opinion Council's June 2002 Omnibus Study was conducted between 30 June and 11 July.

As part of this study the JCOC re-ran a single question on behalf of the Jeweler's Vigilance Committee in an effort to further substantiate the initial findings of JVC's proprietary research study above.

That re-run question was a repeat of question 9 in the study above with the addition of a response pinpointing the use of the word synthetic.

The results of the re-run question support the initial findings and further suggest that there appears to be very little understanding, among consumers, of what the term "Cultured Diamond" means.

The JCOC June 2002 Omnibus study results were as follows:

Jewelry Consumer Opinion Council Research Study 12 July 2002

#### Methodology

The Consumer Purchasing Predictions for 2002 research study was conducted using MVI Marketing Ltd.'s Jewelry Consumer Opinion Council (JCOC).

This approach uses demographic sampling to gather respondent feedback to a questionnaire they complete via email.

The sample included men and women aged 18 years and older and resident in the USA. No other demographic quotas were applied.

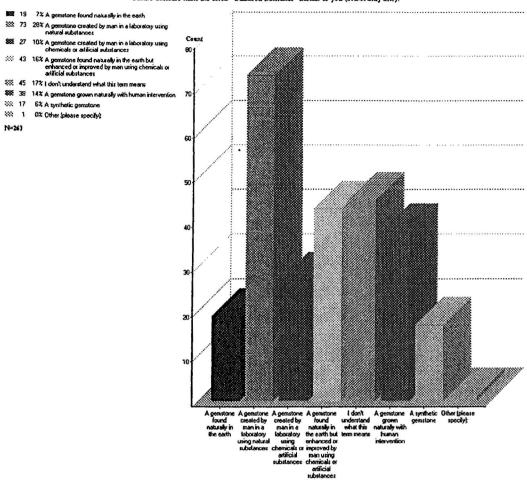
502 responses were received over a twelve-day period from 30 June- 11 July 2002. Respondents not likely to participate in fine jewelry purchasing before the end of 2002 were screened out.

The JCOC offered participation in a sweepstakes draw as an incentive to participation in the study.

Complete results may be viewed at the following link:

http://jcoc.net/client\_portal/reports/consumer\_predictions.htm

#### Please describe what the term "Cultured Diamond" means to you (select only one).



## EXPRESS

Page 1

TNS October 17, 2005 Job #US-80041

Page	Table	Title	Base	Total
1	1	dial. Have you heard of cultured diamonds?	Total Respondents	1000
2	2	diala. What do you think they are?	Those respondents who have not heard of cultured diamonds	659
5	3	dialb. What do you think they are?	Those respondents who have heard of cultured diamonds	341
8	4	diala/dialb. What do you think they are?	Total Respondents	1000
11	5	dia2. Do you believe that cultured diamonds are a natural product?	Total Respondents	1000
12	6	Q.906 What is the last grade of school you completed?	Total Respondents	1000
14	7	Q.912 Age of respondent	Total Respondents	1000
17	8	Q.926 Marital Status	Total Respondents	1000
18	9	Q.931 Employment Status	Total Respondents	1000
19	10	Q.936 Counting yourself, how many adults live in your household?	Total Respondents	1000
21	11	Q.936a Of those adults, how many are males?	Total Respondents	1000
22	. 12	Q.936a Of those adults, how many are females?	Total Respondents	1000
23	13	Q.941 Presence of children	Total Respondents	1000
24	14	Q.941A Thinking about all the people living in your household related to you or not, how many are between the ages of 5 years or under?	Total Respondents	1000
26	15	Q.941B Thinking about all the people living in your household related to you or not, how many are between the ages of 6 to 11?	Total Respondents	1000
28	16	Q.941C Thinking about all the people living in your household related to you or not, how many are between the ages of 12 to 17?	Total Respondents	1000
30	17	q981. Are you or is someone else in the household the person who does most of the shopping for groceries and household items?	Total Respondents	1000

## EXPRESS

TNS October 17, 2005 Job #US-80041

Page	Table	Title	Base	Total
31	18	q982. Do you have internet access or e-mail?	Total Respondents	1000
32	19	q983. Do you own or rent your home?	Total Respondents	1000
33	20	Children by age groups	Total Respondents Those with children in the household	305
35	21	Q.956 Are you White, Black or African American, or some other race?	Total Respondents	1000
37	22	q960a. Thinking about your household's total investable assets, please INCLUDE all stocks, bonds, mutual funds, CDs, IRAs, SEPs, Keoghs, checking and savings accounts. Please EXCLUDE any company sponsored retirement accounts such as 401Ks or Pension plans, and also EXCLUDE the value of your home?	Total Respondents	1000
38	23	Q.961 If you added together the yearly incomes, before taxes, of all the members of your household for the last year, 2004, would the total be?	Total Respondents	1000
41	24	Q.971 Do you consider yourself to be the head of household?	Total Respondents	1000
42	25	Gender of respondent	Total Respondents	1000
43	26	Deluxe Banner by Standard Banner	Total Respondents	1000

Table 1 dial. Have you heard of cultured diamonds?

Base: Total Respondents

		Heard o	of Cult	ured I	Diamonds	Belie	eve A Na	atural	Product
	Total	Yes	No	Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000	341	655	4	-	240	604	146	10
	100	100	100	100	_	100	100	100	100
Total Weighted	1000 100	320 100	676 100	4* 100*		** 260 ** 100	585 100	146 100	8 100
Yes	320 32.0	320 100.0C	-	_	_	76 29.2	219 37.5	21 14.3	4 52.1
No	676 67.6	-	676 100.0E		-	184 70.8	363 62.0	125 85.3	4 47.9
Don't know	4 0.4	-	-	4 100.0	-	_	3 0.6	0.4	-
Refused	-	-	_	-	-	-	-	-	

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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TNS October 17, 2005 Job #US-80041

Table 2 diala. What do you think they are?

Base: Those respondents who have not heard of cultured diamonds

		Heard o			Diamonds				
	m - 1 - 1			Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	659 100	-	655 100	4 100	-	159 100	369 100	125 100	6 100
Total Weighted	680 100	-** -**	676 100	4* 100*		* 184 * 100	366 100	125 100	4 100
Man-Made	70 10.4	-	68 10.1	2 55.8	-	8 4.4	60 16.3	2 1.6	1 14.4
Jewel/Jewelery	39 5.7	-	38 5.7	1 15.0	=	18 9.8	15 4.0	6 5.1	-
Artificial	37 5.4	-	36 5.3	1 29.2	-	4 2.4	24 6.7	8 6.3	-
Diamonds	34 5.0	-	34 5.0	-	-	16 8.6	12 3.2	6 5.0	_
Something related to health	21 3.1	-	21 3.1	-	-	9 4.6	11 3.0	1.0	-
Manufactured diamonds	15 2.2	_	15 2.2	-	_	0.4	14 3.9	-	-
Gem	14 2.0	-	14 2.0	-	-	3 1.9	8 2.3	2 1.5	_
A company	10 1.5	-	10 1.6	=	-	2 1.0	6 1.6	3 2.2	-
Stone	10 1.5	_	10 1.5	-	_	2 1.3	8 2.2	-	-

TNS October 17, 2005 Job #US-80041

Table 2 diala. What do you think they are?

Base: Those respondents who have not heard of cultured diamonds

					Diamonds				
	Total	Yes	Мо	Don't Know	Refused	Yes		Don't	Refused
	(A)	(B)	(C)		(E)	(F)	(G)	(H)	(I)
Synthetic	10 1.5	-	10 1.5	-	=	-	10 2.6	* 0.3	-
CZ/Cubic Zirconia or simulant	9 1.3	- -	9 1.3	-	-	* 0.2	8 2.3	:	- -
Expensive	6 0.9	<del>-</del>	6 0.9	-	-	3 1.5	3 0.9	-	-
Investment company/ firm	5 0.7	_	5 0.7	_	=	1.1	3 0.8	-	-
Lab-Made	3 0.4	-	3 0.4	-	- -	-	3 0.7	_	-
Colored diamonds	3 0.4	-	3 0.4	-		3 1.4	-	-	-
Cut diamonds	0.4	J	0.4	Ξ	7	0.7	0.3	-	=
Something that is made in a mine	2 0.3	-	2 0.3	_	-	0.4	2 0.4	-	<u>-</u>
Carbon/Carbon Compressed	2 0.3	-	2 0.3	-	-	0.8	0.2	_	_
Natural or real Diamond	0.2	-	1 0.2	-	=	0.7	-	-	=
Like a cultured pearl	0.2	=	0.2	_	-	0.5	* 0.1	<del>-</del> -	-
Branded diamond (new brand)	0.1	-	0.1	- -	-	1 0.5	-	-	-

EXPRESS

TNS October 17, 2005 Job #US-80041

Table 2 diala. What do you think they are?

Base: Those respondents who have not heard of cultured diamonds

			of Cul		Diamonds	Belie	ve A Na	atural	Product
	Total	Yes	No	Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Un-cut diamonds	1 0.1	_	1 0.1	-		_	1 0.1	-	_
Machine-made	*	-	*	-	-	* 0.1	=	=	=
Diamond for Cultured	-	_	_	-	_	-	_	-	_
People Something that	_	-	_	_	-	_	_	_	-
builds on nature or enhances nature	-	-	-	-	=	_	_	-	=
Other	73 10.7	=	73 10.7	=	=	20 11.0	42 11.4	11 8.4	-
None/Nothing	7 1.0	_	7 1.0	=	-	0.7	4 1.2	1 1.2	-
Don't know	319 46.8	_	319 47.1	-	-	88 47.8	143 39.1	84 66.9	3 85.6
Refused	5 0.8	-	5 0.8	_	-	2 1.2	2 0.6	1 0.9	=

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E

\*\* very small base (under 30) ineligible for sig testing

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Table 3 dialb. What do you think they are?

Base: Those respondents who have heard of cultured diamonds

			of Cultu						Product
			D	on't				Don't	
	Total	Yes			Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	341 100	341 100	-	-	-	81 100	235 100	21 100	100
Total Weighted	320 100	320 100	* * * *	_ * * _ * *	-* -*	* 76 * 100	219 100	21 100	4 100
Man-Made	100 31.2	100 31.2	_	_	-	24 32.0	73 33.2	3 14.3	-
Artificial	44 13.6	44 13.6	-	-	-	5 7.1	37 16.9	1 6.2	-
Manufactured diamonds	36 11.3	36 11.3	-	-	-	7 8.6	27 12.1	3 14.1	-
Lab-Made	20 6.2	20 6.2	-	-	-	3 3.3	17 7.9	=	-
Carbon/Carbon Compressed	16 5.0	16 5.0	-	-	Ī	5 5.9	12 5.3	-	-
Synthetic	13 4.2	13 4.2	-	-	-	1.1	13 5.7	-	-
Diamonds	10 3.1	10 3.1	_	-	-	3 4.1	5 2.3	-	2 44.4
Natural or real Diamond	10 3.0	10 3.0		-	· -	5 7.1	3 1.1	2 8.0	-
Stone	8 2.5	8 2.5	-	-	_	3 4.4	5 2.1	-	-

Table 3 dialb. What do you think they are?

Base: Those respondents who have heard of cultured diamonds

					Diamonds				Product
	Total	Yes	No	Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
CZ/Cubic Zirconia or simulant	7 2.2	7 2.2	-	-	-	-	6 2.8	1 3.6	-
Gem	6 1.8	6 1.8	-	-	_	1 1.6	4 2.0	-	_
Cut diamonds	5 1.6	5 1.6	-	=	_	4 5.1	1 0.6	=	-
Expensive	4 1.4	4 1.4	-	-	_	1 1.6	1 0.4	2 11.5	_
Jewel/Jewelery	3 1.0	3 1.0	-	-	_	2.8	1 0.5	<u>-</u>	-
Like a cultured pearl	3 1.0	3 1.0	-	-	_	-	0.7	8.0	=
Something that is made in a mine	2 0.6	2 0.6	-	- -		1 1.6	1 0.3	_	-
Un-cut diamonds	0.4	1 0.4	-	-	_	-	-	1 6.1	-
Colored diamonds	0.3	0.3	-	-	-	1.3	-	-	-
Branded diamond (new brand)	1 0.3	0.3	-	-	-	-	1 0.4	-	-
A company	1 0.2	1 0.2	-	_		0.7	-	_	-
Something related to health	* 0.1	* 0.1	_	-	<u>.</u>	<del>-</del>	* 0.1		-

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 3 dialb. What do you think they are?

Base: Those respondents who have heard of cultured diamonds

		Heard	of Cul	ured l	Diamonds	Belie	ve A Na	atural	Product
	Total	Yes	No	Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Something that builds on nature or enhances nature	-	-	÷	-		Ī	-	=	=
<pre>Investment company/ firm</pre>	-	-	-	_	-	-	-	-	-
Diamond for Cultured People	-	-	-	-	-	-	_	-	-
Machine-made	_	-	_	-	-	-	_	_	-
Other	32 9.9	32 9.9	=	=	-	11 14.2	16 7.3	3 16.3	1 32.5
None/Nothing	-	-	_	_	-	° -	_	_	-
Don't know	27 8.4	27 8.4	_	-	-	7 9.8	15 7.0	4 19.9	-
Refused	0.3	1 0.3	-	_	<del>-</del> -	-	_	=	1 23.1

Table 4 diala/dialb. What do you think they are?

Base: Total Respondents

					Diamonds				
	Total	Yes		Don't	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	100		* 260 * 100	585 100	146 100	8 100
Man-Made	171 17.1	100 31.2C	68 10.1	2 55.8		32 12.5	133 22.6	5 3.4	1 6.9
Artificial	80 8.0	44 13.6C	36 5.3	1 29.2	-	10 3.7	61 10.5	9 6.2	-
Manufactured diamonds	51 5.1	36 11.3C	15 2.2	-	-	7 2.8	41 7.0	3 2.0	-
Diamonds	444.4	10 3.1	34 5.0	-	-	19 7.3	17 2.8	6 4.3	23.1
Jewel/Jewelery	42 4.2	3 1.0	38 5.7B	1 15.0	-	20 7.7	16 2.7	6 4.3	-
Synthetic	23 2.3	13 4.2C	10 1.5	-	-	0.3	22 3.8	0.2	-
Lab-Made	22 2.2	20 6.2C	3 0.4	-	-	3 1.0	20 3.4	-	-
Something related to health	21 2.1	* 0.1	21 3.1B	-	-	9 3.3	11 1.9	0.8	-
Gem	19 1.9	6 1.8	14 2.0	=	-	5 1.8	13 2.2	2 1.3	-

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 4 diala/dialb. What do you think they are?

Base: Total Respondents

					Diamonds				
	Tatal			Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Stone	18 1.8	8 2.5	10 1.5	-	-	6 2.2	13 2.2	-	-
	1.0	2.3	1.5	-	-	2.2	2.2	-	_
Carbon/Carbon Compressed	18 1.8	16 5.0C	2 0.3	-	-	6 2.3	12 2.1		_
Complessed	1.0	3.00	0.5			2.5	2.1		
CZ/Cubic Zirconia or	16	7	9	_	_	*	15	1	=
simulant	1.6	2.2	1.3	=	-	0.1	2.5	0.5	_
A company	11	1	10	_	_	2	6	3	_
20 40 <b>a</b> 180000 1 <b>a</b>	1.1	0.2	1.6b	-	-	0.9	1.0	1.9	-
Natural or real	. 11	10	1	-	-	7	3	2	-
Diamond	1.1	3.0C	0.2	_	-	2.6	0.4	1.1	_
Expensive	11	4	6	_	_	4	4	2	_
	1.1	1.4	0.9	_	_	1.5	0.7	1.6	-
Cut diamonds	8	5	2	_		5	2	-	.—
	0.8	1.6c	0.4	-	-	2.0	0.4	-	-
Investment company/	5	-	5	_	-	2	3	_	-
firm	0.5	_	0.7	-	-	0.8	0.5	_	-
Like a cultured	4	3	1	_	_	1	2	2	_
pearl	0.4	1.0	0.2	_	~	0.4	0.3	1.1	=
Something that is	4	2	2	-	-	2	2	_	-
made in a mine	0.4	0.6	0.3	-		0.8	0.4	-	_
Colored diamonds	4	1	3	_	-	4	-	-	_
	0.3	0.3	0.4	-	_	1.3	-	_	()

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 4 diala/dialb. What do you think they are?

Base: Total Respondents

		Heard	of Cul	tured i	Diamonds			atural	Product
	Total	Yes	No	Don't Know	Refused		No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Branded diamond (new brand)	2 0.2	1 0.3	1 0.1		- -	1 0.4	1 0.1		-
Un-cut diamonds	2 0.2	1 0.4	1 0.1	_	-	_	0.1		-
Machine-made	*	-	*	-	=	0.1	-	-	= -
Diamond for Cultured People	_	-	-	-	-	-	_	-	<u>-</u>
Something that builds on nature or enhances nature	_	_	-	-	-	-	-	-	-
Other	104 10.4	32 9.9	73 10.7	_	-	31 12.0	58 9.8		1 16.9
None/Nothing	7 0.7	-	7 1.0h	- -	-	1 0.5	<b>4</b> 0.7		=
Don't know	345 34.5	27 8.4	319 47.1E	- 3 -	-	95 36.7	158 27.1	88 60.2	3 41.0
Refused	6 0.6	1 0.3	5 0.8	-	-	2 0.8	2 0.4	0.8	1 12.0

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 5 dia2. Do you believe that cultured diamonds are a natural product?

Base: Total Respondents

		Heard o	f Cult	ured I	Diamonds	Belie	Product		
	Total	Yes		Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100			* 260 * 100	585 100	146 100	8 100
Yes	260 26.0	76 23.7	184 27.3	=	-	260 100.0	_	_	-
No	585 58.5	219 68.4C	363 53.7	3 85.0	-	-	585 100.0	-	-
Don't know	146 14.6	21 6.5	125 18.5B	1 15.0	-	-	- -	146 100.0	-
Refused	8 0.8	4 1.4	4 0.6	-	=	-	-	-	8 100.0

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Table 6 Q.906 What is the last grade of school you completed?

Base: Total Respondents

		Heard o			Diamonds				
	Total	Yes		Don't	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
Not High School	101	16	85	-	_	36	44	19	1
Graduate (Net)	10.0	4.9	12.6B	-	_	14.0	7.4	13.2	14.1
8th Grade or Less	25 2.5	5 1.7	20 2.9	_	-	11 4.2	8 1.3	5 3.7	1 14.1
Some High School	76 7.5	10 3.2	65 9.7B	_	_	26 9.8	36 6.1	14 9.6	
Graduated High School	365 36.4	112 35.1	250 37.0	2 61.2	<u> </u>	104 39.9	198 33.8	62 42.4	1 13.1
Some College (Net)	524	190	334	1	-	118	337	63	6
	52.4	59.1C	49.4	23.8	-	45.4	57.7	42.7	72.8
Trade or Technical School	27 2.7	8 2.4	19 2.8	-	_	6 2.3	18 3.0	3 1.7	* 4.4
Some College	190 19.0	63 19.6	126 18.7	23.8	=	51 19.7	113 19.4	23 15.8	2 23.0
Graduated College	193 19.3	72 22.4	122 18.0	-	-	45 17.2	126 21.5	21 14.2	2 18.1
Post-graduate	115 11.5	47 14.8C	67 10.0	_	-	16 6.1	80 13.7	16 11.1	2 27.3

Table 6 Q.906 What is the last grade of school you completed?

Base: Total Respondents

Heard of Cultured Diamonds Believe A Natural Product

		=====		======	======	. 5965555555555555555555				
				Don't				Don't		
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	
Refused	11 1.1	-		1 15.0	_	_		_		

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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EXPRESS

TNS October 17, 2005 Job #US-80041

Table 7 Q.912 Age of respondent

Base: Total Respondents

			of Cult		iamonds				Product
	Total	Yes		Don't	Refused	Yes	No	Don't	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100		10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
18-24 (Net)	142	21	121	-	-	61	67	14	-
/	14.2	6.6	17.9E	-	=	23.6	11.5	9.3	_
18 - 20	83 8.3	13 4.2	70 10.3B		=	38 14.7	39 6.7	6 4.2	=
21 - 24	58 5.8	8 2.4	50 7.4B	-	-	23 8.9	27 4.7	7 5.1	-
18-24 Unspecified	0.1	-	0.1	-	-	<u>-</u>	0.2	_	-
25-34 (Net)	170	50	120	_	-	49	94	26	1
9 <del>-1-1</del>	17.0	15.5	17.8	_	-	18.9	16.1	17.4	12.0
25 - 29	67 6.7	10 3.3	57 8.4B	-	=	19 7.5	36 6.2	10 7.1	1 12.0
30 - 34	96 9.6	37 11.5	60 8.8	-	=	30 11.4	54 9.3	13 8.6	_
25-34 Unspecified	6 0.6	3 0.8	4 0.6	_	-	; <u> </u>	4 0.7	3 1.7	-
35-44 (Net)	182	57	123	2	-	56	102	21	3
	18.2	17.8	18.2	55.8	-	21.6	17.5	14.1	35.4

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 7 Q.912 Age of respondent

Base: Total Respondents

						Believe A Natura		atural	Product
	Total	Yes	No	Don't	Refused		No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
35 - 39	89 8.9	28 8.8	61 9.0	-	-	25 9.6	52 8.9	12 8.0	-
40 - 44	90 9.0	27 8.4	62 9.2	1 23.8		31 12.0	47 8.0	9 6.1	3 35.4
35-44 Unspecified	3 0.3	2 0.6	* 0.1	1 32.0		-	3 0.6	-	-
45-49 (Net)	93	45	47	-	-	19	59	15	-
	9.3	14.2C	7.0	-	-	7.3	10.1	10.1	-
45 - 49	86 8.6	40 12.6C	45 6.7	-	-	19 7.3	52 8.9	15 10.1	-
45-49 Unspecified	7 0.7	5 1.5C	2 0.3		-	_	7 1.1	? ?	_
50-54 (Net)	119	42	78	=	=	21	78	18	2
	11.9	13.0	11.5	-	-	8.1	13.4	12.4	21.3
50 - 54	116 11.6	41 12.7	75 11.2	-	-	21 8.1	75 12.8	18 12.4	2 21.3
50-54 Unspecified	3 0.3	1 0.3	2 0.3	2	-	_	3 0.5	'n	-
55-64 (Net)	145	52	92	1	=	26	96	24	=
<del></del>	14.5	16.4	13.6	29.2	=	9.8	16.3	16.3	=
55 - 59	76 7.6	29 9.0	47 6.9	-	- -	14 5.5	50 8.5	12 8.3	-

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 7 Q.912 Age of respondent

Base: Total Respondents

						s Believe A Natural			
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
60 - 64	65 6.5	23 7.1	41 6.0	1 29.2	-	11 4.4	42 7.2	11 7.5	-
55-64 Unspecified	5 0.5		4 0.6	-	-	_	4 0.7	-	<u>-</u> -
65+ (Net)	145	51	93	1	-	28	86	28	3
	14.5	16.0	13.8	15.0	-	10.6	14.8	19.2	31.2
65 - 69	42 4.2	13 4.0	29 4.3	=	=	11 4.2	23 3.9	7 4.8	1 9.1
65+ Unspecified	7 0.7	2 0.7	4 0.6	1 15.0	-	2 0.6	4 0.6		-
70 - 74	39 3.9	14 4.5	24 3.6	-	-	5 1.8	26 4.5	7 4.5	1 9.1
75+	58 5.8	22 6.8	36 5.3	_	-	10 4.0	34 5.7		1 13.1
Refused	4 0.4	2 0.6	2 0.3	_	-	7 -	2 0.4	2 1.2	-
Mean	45.14	48.28C	43.62	51.67	=	40.14	46.42	48.58	52.11
Standard Deviation	17.23	15.77	17.71	15.95	-	16.72	16.89	17.80	16.55
Standard Error	0.55	0.86	0.69	7.98	-	1.08	0.69	1.48	5.23
Median	45	48	42	40	-	38	47	48	53

Table 8 Q.926 Marital Status

Base: Total Respondents

		Heard of Cultured Diamonds					s Believe A Natural		
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
Married	587 58.6	218 68.2C	367 54.3	1 29.2	_ _	132 50.8	368 62.9	81 55.1	5 64.4
Separated	27 2.7	6 1.9	19 2.9	1 23.8	-	8 3.0	16 2.7	3 2.0	-
Divorced	75 7.5	25 7.8	50 7.4	_	_	22 8.4	44 7.5		-
Widowed	72 7.2	23 7.1	50 7.3	-	-	13 5.0	36 6.2	21 14.5	2 21.6
Never married	229 22.9	44 13.6	184 27.2B	32.0	-	83 32.0	115 19.6	30 20.2	1 14.1
Refused	11 1.1	4 1.4	6 0.9	1 15.0	-	2 0.7	7 1.1	2 1.6	_

Table 9 Q.931 Employment Status

Base: Total Respondents

					Diamonds			atural	Product
	Total	Yes		Don't	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
Employed Part-Time	125 12.5	31 9.7	93 13.7	1 32.0		42 16.2	75 12.8	7 4.9	1 10.4
Employed Full-Time	491 49.1	176 54.8C	315 46.6	1 23.8	-	118 45.2	295 50.4	75 51.0	4 47.4
Unemployed	58 5.8	16 5.0	42 6.3	_	-	20 7.8	30 5.1	7 5.1	1 11.0
Laid off	6 0.6	1 0.3	3 0.5	1 29.2		0.1	2 0.4	3 2.1	=
Retired	202 20.2	67 20.8	136 20.1	-	-	42 16.0	120 20.5	38 26.2	3 31.2
Full-time homemaker	49 4.9	17 5.2	32 4.7	_	-	14 5.5	29 4.9	6 3.9	-
Student	24 2.4	3 0.9	21 3.1b	-	-	11 4.1	8 1.4	5 3.2	-
Unemployed due to disability	33 3.3	6 2.0	26 3.9	_	=	9 3.6	21 3.5	3 2.0	= -
Refused	12 1.2	4 1.3	8 1.1	1 15.0	-	4 1.5	6 1.0	2 1.6	- -

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 10 Q.936 Counting yourself, how many adults live in your household?

Base: Total Respondents

					Diamonds				
	Total	Yes	Йо	Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
1	155 15.5	44 13.6	111 16.4	1 15.0	_	36 13.8	80 13.6	38 25.8	1 17.5
2	606 60.6	206 64.2	397 58.7	3 85.0	-	149 57.2	372 63.6	80 54.8	5 54.6
3	154 15.4	45 14.1	108 16.0	_	7	49 18.8	92 15.6	12 8.3	1 11.0
4	64 6.4	22 6.9	41 6.1	-	_	17 6.6	34 5.8	11 7.4	1 16.9
5	18 1.8	3 1.0	15 2.2	-	-	7 2.9	5 0.9	5 3.7	-
6	4 0.4	_	4 0.5	-	_	2 0.7	2 0.3	_	_
20	*	0.1	_	_	_	_	0.1	_	_
Mean	2.20	2.19	2.21	1.85	(2)	2.30	2.19	2.08	2.27
Standard Deviation	0.92	0.96	0.90	0.41	-	0.94	0.90	0.98	1.00
Standard Error	0.03	0.05	0.04	0.21	-	0.06	0.04	0.08	0.32

Table 10 Q.936 Counting yourself, how many adults live in your household?

Base: Total Respondents

		Heard	of Cul	tured	Diamonds	Belie	eve A Na	atural	Product
		======		Don't		=====	***===	Don't	
	Total	Yes	No		Refused	Yes	No		Refused
						<b>-</b>			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Median	2	2	2	2	-	2	2	2	2

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Table 11 Q.936a Of those adults, how many are males?

Base: Total Respondents

					Diamonds				
	Total	Yes		Don't	Refused	Yes	No	Don't Know	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
0	134 13.4	31 9.7	101 15.0B	2 47.0	=	36 13.7	64 11.0	33 22.6	1 11.3
1	690 69.0	235 73.4c	453 67.0	2 53.0	<u>-</u>	175 67.2	425 72.7	85 58.1	5 60.8
2	147 14.7	46 14.4	100 14.9	-	_ °	39 15.1	83 14.1	22 15.3	2 27.9
3	21 2.1	5 1.4	17 2.5	-	-	9 3.4	8 1.4	5 3.2	-
4	1 0.1	1 0.4	_	_	- -,	-	1 0.2	-	-
Refused	7 0.7	2 0.7	4 0.6	_	-	0.6	4 0.6	0.8	-
Mean	1.06	1.09	1.05	0.53	_	1.08	1.06	0.99	1.17
Standard Deviation	0.61	0.57	0.63	0.58	=	0.65	0.57	0.72	0.64
Standard Error	0.02	0.03	0.02	0.29	=	0.04	0.02	0.06	0.20
Median	1	1	1	1	-	1	1	1	1

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 12 Q.936a Of those adults, how many are females?

Base: Total Respondents

			of Cult		Diamonds				Product
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000	341	655	4	-	240	604	146	10
	100	100	100	100	-	100	100	100	100
Total Weighted	1000	320	676	4 *		* 260	585	146	8
	100	100	100	100*	** _*	** 100	100	100	100
0	80	25	55	-	-	17	48	14	1
	8.0	7.7	8.1	-	-	6.6	8.2	9.4	6.2
1	730	243	484	3	-	177	439	108	6
	73.0	75.8	71.6	68.0	-	67.8	75.1	73.5	76.9
2	150	46	102	1	-	55	74	19	1 1 1
	15.0	14.5	15.1	32.0	-	21.2	12.7	13.1	16.9
3	32 3.2	4 1.2	28 4.1E	-	-	10 3.7	17 3.0	5 3.2	_
	3.2	1.2	4.10	, –	_	3.7	3.0	3.2	_
4	0.3	_	0.4	-	-	-	3 0.5	_	=
Refused	6 0.6	0.8	3 0.5	_	-	0.6	3 0.5	0.8	_
Mean	1.14	1.09	1.17	1.32	_	1.22	1.12	1.10	1.11
Standard Deviation	0.61	0.51	0.64	0.54	-	0.62	0.60	0.59	0.50
Standard Error	0.02	0.03	0.03	0.27	Η.	0.04	0.02	0.05	0.16
Median	1	1	1	1	-	1	1	1	1

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 13 Q.941 Presence of children

Base: Total Respondents

			Heard	of Cul	tured [	Diamonds	Belie	Product		
					Don't				Don't	
		Total	Yes	No	Know	Refused	Yes	No	Know	Refused
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total	Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total	Weighted	1000 100	320 100	676 100	4* 100*		** 260 ** 100	585 100	146 100	8 100
Yes		369 36.9	112 35.1	256 37.8	1 23.8	=	116 44.7	206 35.2	42 28.6	5 56.7
No		631 63.1	208 64.9	420 62.2	3 76.2	-	144 55.3	379 648	104 71.4	4 43.3

Table 14 Q.941A Thinking about all the people living in your household related to you or not, how many are between the ages of 5 years or under?

Base: Total Respondents

			of Cul		Diamonds				
	Total	Yes	No	Don't Know		Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	100		** 260 ** 100	585 100	146 100	8 100
0	838 83.8	274 85.4	562 83.2	2 61.2	-	209 80.2	489 83.5	134 91.5	7 85.2
1	105 10.5	28 8.8	76 11.3	1 23.8	-	25 9.6	73 12.5	6 4.2	1 14.8
2	39 3.9	14 4.2	26 3.8	-	_	22 8.5	14 2.4	3 2.3	_
3	3 0.3	-	3	=	-	0.4	0.1	0.8	-
4	0.1	-	0.2	-	-	1 0.5	_	-	-
5	0.1	0.2	_	-	-	0.3	-	-	_
Refused	12 1.2	1.3	8 1.1	1 15.0	_	0.7	9 1.5	1.2	-
SIGMA	1000 100.0	320 100.0	676 100.0	100.0	=	260 100.0	585 100.0	146 100.0	8 100.0
Mean	0.20	0.19	0.21	0.28	-	0.31	0.18	0.11	0.15
Standard Deviation	0.54	0.53	0.54	0.54	-	0.72	0.45	0.44	0.38

Table 14 Q.941A Thinking about all the people living in your household related to you or not, how many are between the ages of 5 years or under?

Base: Total Respondents

		Heard	of Culi	tured 1	Diamonds	Belie	eve A Na	atural	
		=====	×=====:	Don't	=======	82222		Don't	*===
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
			(0)			<del>-</del>			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Standard Error	0.02	0.03	0.02	0.31	-	0.05	0.02	0.04	0.12

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Table 15 Q.941B Thinking about all the people living in your household related to you or not, how many are between the ages of 6 to 11?

Base: Total Respondents

					Diamonds				
	Total	Yes		Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	100		* 260 * 100	585 100	146 100	8 100
0	814 81.4	271 84.5	541 80.0	2 61.2	-	211 81.0	474 81.0	122 83.0	7 85.9
1	131 13.1	31 9.6	99 14.7B	1 23.8	-	37 14.4	74 12.6	19 12.9	1 14.1
2	34 3.4	10 3.1	24 3.6	-	-	9 3.3	23 3.9	3 2.2	=
3	7 0.7	2 0.7	5 0.7	-	-	0.1	6 1.0	0.7	-
4	0.1	0.3	-	-	-	_	0.2	1_	-
5	0.2	2 0.6c	_	-	_	0.7	-	-	_
Refused	11 1.1	4 1.2	7 1.0	1 15.0	-	0.5	8 1.4	2 1.2	_
SIGMA	1000 100.0	320 100.0	676 100.0	4 100.0	-	260 100.0	585 100.0	146 100.0	8 100.0
Mean	0.24	0.22	0.24	0.28	_	0.25	0.24	0.20	0.14
Standard Deviation	0.58	0.66	0.55	0.54	-	0.64	0.58	0.50	0.37

Table 15 Q.941B Thinking about all the people living in your household related to you or not, how many are between the ages of 6 to 11?

Base: Total Respondents

		неага	of Cul	turea	Diamonds	Belle	eve A Na	atural	Product
						=====	****		
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(È)	(F)	(G)	(H)	(I)
Standard Error	0.02	0.04	0.02	0.31	_	0.04	0.02	0.04	0.12

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E

\*\* very small base (under 30) ineligible for sig testing

Table 16 Q.941C Thinking about all the people living in your household related to you or not, how many are between the ages of 12 to 17?

Base: Total Respondents

					Diamonds				
	Total	Yes	No	Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000	320 100	676 100	100		* 260 * 100	585 100	146 100	8 100
0	809 80.9	258 80.6	548 81.1	2 61.2	-	202 77.5	481 82.1	122 83.1	5 58.0
1	114 11.4	37 11.4	77 11.4	-	-	37 14.2	64 11.0	11 7.5	1 16.9
2	57 5.7	21 6.5	36 5.3	1 23.8	-	15 5.8	29 4.9	11 7.8	2 25.0
3	7 0.7	0.3	6 0.9	-	-	4 1.4	3 0.4	1 0.5	-
4	0.1	-	0.2	_	-	1 0.5	-	_	-
5	0.1	-	1 0.2	-	_	_	0.2	_	-
Refused	11 1.1	1.2	7 1.0	1 15.0	-	1 0.5	8 1.3	2 1.2	-
SIGMA	1000 100.0	320 100.0	676 100.0	100.0	-	260 100.0	585 100.0	146 100.0	8 100.0
Mean	0.26	0.26	0.27	0.56	-	0.32	0.24	0.25	0.67
Standard Deviation	0.63	0.58	0.65	1.08	_	0.69	0.59	0.61	0.91

Table 16 Q.941C Thinking about all the people living in your household related to you or not, how many are between the ages of 12 to 17?

Base: Total Respondents

		Heard	of Cul	tured :	Diamonds	Beli	eve A Na	atural	Product
		======		****		~====			
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Standard Error	0.02	0.03	0.03	0.62	-	0.04	0.02	0.05	0.29

Table 17 q981. Are you or is someone else in the household the person who does most of the shopping for groceries and household items?

Base: Total Respondents

		Heard of Cultured Diamonds							
	Total	Yes	No	Don't		Yes	No	Don't Know	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
Respondent	567 56.7	184 57.5	379 56.1	3 85.0		151 57.8	333 57.0	80 54.5	3 40.5
Someone else	259 25.9	84 26.1	176 26.0	-	-	67 25.7	154 26.3	37 25.5	1 16.9
Respondent and someone else	162 16.2	49 15.2	114 16.8	_	-	41 15.7	92 15.6	26 18.0	4 42.6
Don't know	0.1	-	0.1	-	-	-	-	1 0.4	-
Refused	11 1.1	4 1.1	7 1.0	1 15.0		2 0.7	7 1.2	2 1.6	-

Table 18

q982. Do you have internet access or e-mail?

Base: Total Respondents

		Heard o	f Cult	ured I	Diamonds	Belie	ve A Na	atural	Product
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	100*		* 260 * 100	585 100	146 100	8 100
At home	339 33.9	105 32.9	231 34.2	2 61.2	=	85 32.7	203 34.7	49 33.6	20.0
At work	60 6.0	16 4.9	44 6.5	-	_	13 5.0	35 5.9	12 8.1	4.4
Both	306 30.5	122 38.0C	183 27.0	1 23.8	_	70 27.0	205 35.0	27 18.6	3 39.3
Neither	286 28.6	74 23.0	213 31.58		-	90 34.6	139 23.7	55 37.2	3 36.2
Don't know	1 0.1	=	0.1	-	-	-	-	0.4	-
Refused	9 0.9	4 1.1	5 0.7	1 15.0	-	2 0.7	4 0.8	3 2.0	_

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Table 19 q983. Do you own or rent your home?

Base: Total Respondents

		Heard o	f Cult	ured I	Diamonds	Belie	ve A Na	atural	Product
				Don't				Don't	
	Total	Yes			Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000	341	655	4	=	240	604	146	10
	100	100	100	100	-	100	100	100	100
Total Weighted	1000	320	676	4*		* 260	585	146	8
	100	100	100	100*	* -*	* 100	100	100	100
Own	741	260	479	2	_	171	455	110	5
	74.1	81.2C	70.8	53.0	=	65.5	77.8	74.9	64.4
Rent	238	51	186	1	-	85	116	34	3
	23.8	15.9	27.5B	32.0	-	32.7	19.8	23.1	35.6
Don't know	7	4	2	-	-	3	4	-	-
	0.7	1.3	0.4		-	1.0	0.7	-	-
Refused	15	5	9	1	-	2	10	3	-
	1.5	1.6	1.3	15.0	_	0.7	1.7	2.0	-

Table 20 Children by age groups

BASE: Those with children in the household

Base: Total Respondents

					)iamonds				
	Total	Yes	No	Don't	Refused			Don't Know	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	305 100	97 100	207 100	1 100	<u>-</u> -	95 100	174 100	32 100	4 100
Total Weighted	356 100	104* 100*	251 100	1* 100*		* 116 * 100	195 100	40 100	4 100
Under 1 year old	39 11.0	9 8.9	30 11.9	-	-	15 13.1	18 9.3	5 12.4	1 19.8
1 year old	26 7.4	9 8.2	18 7.0	=	=	13 11.2	10 5.2	3 7.5	=
2 years old	36 10.1	6 5.8	30 11.9	-	_	15 13.3	18 9.5	2 4.7	-
3 years old	31 8.8	8.1	23 9.1	_	<del>-</del> -	8 7.1	18 9.3	5 12.1	_
4 years old	35 9.9	11 10.5	23 9.3	1	-	15 13.3	19 9.7	1 1.7	_ H
5 years old	19 5.4	9 9.2c	10 3.9	-	-	7 5.8	11 5.9	1 2.9	-
6 years old	29 8.3	8 8.2	21 8.3	-	-	7 6.4	13 6.8	8 19.0	1 26.9
7 years old	29 8.0	8 7.8	20 8.1	-	-	10 8.7	14 7.0	5 11.6	-
8 years old	49 13.9	12 11.5	37 14.9	-	-	14 12.1	30 15.4	5 13.2	=

Table 20 Children by age groups

BASE: Those with children in the household

Base: Total Respondents

					Diamonds				
	Total	Yes	No	Don't	Refused			Don't	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
9 years old	39 11.0		31 12.3	-	-	15 13.2			-
10 years old	25 7.0	8 8.2	16 6.2	100.0	-	7 6.2	17 8.5	1 2.9	-
11 years old	44 12.3	18 17.7c	25 10.1	-	-	10 8.5	30 15.4		-
12 years old	39 11.1	8 8.2	31 12.3	_	-	14 12.3		4 9.2	-
13 years old	40 11.2	11 11.0	28 11.3		=	16 13.7	18 9.2	5 12.3	21.0
14 years old	43 12.2	13 12.2	31 12.2	-	-	14 12.3	21 10.7	8 20.0	-
15 years old	44 12.5		25 9.9	100.0	-	14 12.2		3 8.6	3 59.2
16 years old	31 8.6	12 11.4	18 7.1	100.0		9 7.7			26.9
17 years old	45 12.6	10 10.0	34 13.7	-	-	17 15.0	18 9.4		1 21.0

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Table 21 Q.956 Are you White, Black or African American, or some other race?

Base: Total Respondents

		Heard o			iamonds		eve A Na	atural	Product
	Total	Yes		Don't	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	=	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
White	701 70.0	246 76.8C	451 66.7	3 85.0	-	166 63.6	437 74.6	93 63.6	5 64.8
Black or African- American	98 9.8	23 7.2	75 11.0b	=	=	29 11.2	50 8.5	19 12.9	=
Hispanic (Net)	124	26	98		-	41	58	24	=
	12.4	8.1	14.5B	-	-	15.8	10.0	16.7	_
White Hispanic	56 5.6	20 6.1	36 5.3	J	-	20 7.5	27 4.6	9 6.3	-
Black Hispanic	17 1.7	3 0.8	14 2.1		-	6 2.5	10 1.8	-	- -
Hispanic (No race given)	51 5.1	4 1.2	47 7.0B	-	-	15 5.8	21 3.6	15 10.4	-
Asian	9 0.9	5 1.5	4 0.7	_	-	4 1.4	3 0.5	2 1.6	_
Native American	13 1.3	5 1.7	8 1.2	-	-	4 1.6	6 1.1	1 0.6	2 23.1
Other Race	31 3.1	5 1.6	26 3.8b	-	-	11 4.3	17 2.8	3 2.1	-

EXPRESS

TNS October 17, 2005 Job #US-80041

Table 21 Q.956 Are you White, Black or African American, or some other race?

Base: Total Respondents

		Heard	of Cult	tured	Diamonds	Belie	eve A N	atural	Product
			======			======		=====	
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Refused	25 2.5	10 3.1	14 2.1	1 15.0	_			4 2.6	1 12.0

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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Table 22
q960a. Thinking about your household's total investable assets, please INCLUDE all stocks, bonds, mutual funds, CDs,
IRAs, SEPs, Keoghs, checking and savings accounts. Please EXCLUDE any company sponsored retirement accounts such as
401Ks or Pension plans, and also EXCLUDE the value of your home?

Base: Total Respondents

		Heard o	f Cult		Diamonds				Product
	Total	Yes		Don't Know			No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100			* 260 * 100	585 100	146 100	8 100
Under \$25,000	276 -27.6	76 23.8	197 29.2	2 55.8	_	82 31.5	163 27.9	29 19.8	20.3
\$25,000 to \$49,999	117 11.7	29 9.1	88 13.0b	-	-	40 15.5	60 10.3	16 10.8	1 11.0
\$50,000 to \$99,999	102 10.2	30 9.4	72 10.7	-	-	24 9.0	65 11.0	14 9.5	4.4
\$100,000 to \$499,000	126 12.6	41 12.8	85 12.6	-	-	30 11.6	78 13.4	18 12.3	_
\$500,000 or more	51 5.1	22 6.9	29 4.3	=	-	10 3.8	33 5.6	8 5.5	1 9.1
Don't know	148 14.8	45 14.0	102 15.1	1 29.2	- -	41 15.8	71 12.2	35 23.9	1 6.9
Refused	179 17.9	77 24.0C	102 15.0	1 15.0	<u>-</u>	33 12.8	115 19.7	27 18.3	4 48.4

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Table 23
Q.961 If you added together the yearly incomes, before taxes, of all the members of your household for the last year, 2004, would the total be...?

Base: Total Respondents

		Heard	of Cult		Diamonds				Product
	Total	Yes	No	Don't	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	4* 100*		* 260 * 100	585 100	146 100	8 100
Under \$25,000 (Net)	164	39	125	-	1.— i	58	70	35	1
	16.4	12.3	18.4B	-	-	22.2	12.0	23.8	13.1
Less than \$12,000 (\$10K)	55 5.5	11 3.5	44 6.5b		=	22 8.3	21 3.6	12 8.2	1 6.2
\$12,000 but less than \$15,000 (\$13.5K)	26 2.6	5 1.5	21 3.2	-	Ē	8 3.2	14 2.4	3 2.2	6.9
\$15,000 but less than \$20,000 (\$17.5K)	34 3.4	5 1.6	29 4.3B	_	-	10 4.0	18 3.0	6 4.2	-
\$20,000 but less than \$25,000 (\$22.5K)	40 4.0	16 5.0	24 3.6	-	-	15 5.9	16 2.7	9 6.0	-
Don't know	7 0.7	2 0.8	4 0.6	-	<del>-</del>	1 0.4	0.2	4 2.9	-
Refused	2 0.2	_	0.2	_	-	0.4	=	0.4	=
\$25,000 or over	720	238	479	3	-	180	437	95	7
(Net)	72.0	74.1	70.9	85.0	-	69.2	74.7	65.1	86.9

Table 23
Q.961 If you added together the yearly incomes, before taxes, of all the members of your household for the last year, 2004, would the total be...?

Base: Total Respondents

					Diamonds				
	Total	Yes	No	Don't Know		Yes	No	Don't Know	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
\$25,000 but less than \$30,000 (\$27.5K)	80 8.0	14 4.3	65 9.61	1 3 32.0		22 8.5	39 6.6		* 4.4
\$30,000 but less than \$35,000 (\$32.5K)	46 4.6		30 4.4	-		8 2.9	32 5.5		11.0
\$35,000 but less than \$50,000 (\$42.5K)	116 11.6	35 11.0	80 11.8	1 23.8		28 10.9	74 12.6		-
\$50,000 but less than \$75,000 (\$62.5K)	92 9.2	34 10.5	58 8.6	-	-	26 10.0	56 9.6		1 14.1
\$75,000 but less than \$100,000 (\$87.5K)	217 21.7	72 22.5	144 21.2	1 29.2		62 23.8	124 21.2		1 16.9
\$100,000 or more (\$125K)	101 10.1	39 12.1	62 9.2	_	-	18 6.9	72 12.3		1 9.1
Don't know	46 4.6	16 4.9	30 4.5	_	=	13 5.1	25 4.3	7 4.7	10.4
Refused	22 2.2	12 3.7C	10 1.5	-	-	3 1.0	16 2.7	2 1.5	2 21.1
Don't know	38 3.8	13 4.0	25 3.7	-	-	8 3.2	23 4.0	7 4.5	_

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

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TNS

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Table 23
Q.961 If you added together the yearly incomes, before taxes, of all the members of your household for the last year, 2004, would the total be...?

Base: Total Respondents

		Heard o	of Cult	ured I	Diamonds	Belie	ve A Na	atural	Product
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Refused	78 7.8	31 9.6		1 15.0		14 5.4	55 9.3		-
Mean	59.91	65.93C	57.29	52.30	-	55.53	63.73	52.90	60.19
Standard Deviation	36.25	35.93	36.15	31.35	-	35.06	36.46	35.89	40.87
Standard Error	1.28	2.21	1.56	18.10	-	2.46	1.66	3.33	15.45
Median	43.8	55.0	40.7	36.9	-	41.1	49.4	35.5	50.7

Table 24 Q.971 Do you consider yourself to be the head of household?

Base: Total Respondents

		Heard o	of Cult	ured	Diamonds	Belie	eve A Na	atural	Product
				Don't				Don't	
	Total	Yes	No	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000 100	341 100	655 100	100		240 100	604 100		10 100
Total Weighted	1000 100	320 100	676 100	4 100		** 260 ** 100	585 100		8 100
Yes	600 59.9	211 65.9C	387 57.3	1 23.8		151 57.9	351 59.9		5 54.5
No	371 37.1	100 31.1	269 39.8B	2 61.2		104 40.1	218 37.3		4 45.5
Both partners equally	_	=	_	-	-	=	-	H	=
Don't know	2 0.2	0.3	0.1	-	=	0.4	0.2	-	-
Refused	27 2.7	9 2.7	18 2.7	1 15.0		4 1.6	15 2.6		-

Table 25 Gender of respondent

Base: Total Respondents

		Heard	of Cult	tured I	Diamonds	Belie	eve A Na	atural	Product
	Total	Yes	No	Don't Know	Refused	Yes	No	Don't Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total Unweighted	1000	341 100	655 100	4 100	-	240 100	604 100	146 100	10 100
Total Weighted	1000 100	320 100	676 100	100*		* 260 * 100	585 100	146 100	8 100
Male	484 48.3	168 52.4	316 46.7	-	-	123 47.1	286 48.9	69 47.1	6 65.7
Female	517 51.7	153 47.6	361 53.3	4 100.0	_	138 52.9	299 51.1	77 52.9	3 34.3

Proportions/Means: Columns Tested (5%, 10% risk level) - B/C/D/E \*\* very small base (under 30) ineligible for sig testing

.

Table 26 Deluxe Banner by Standard Banner Base: Total Respondents

		Heard o	of Cul	tured 1	Diamonds	Belie	eve A Na	atural	Product
				Don't				Don't	
	Total	Yes	Мо	Know	Refused	Yes	No	Know	Refused
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Total	1000 100.0	320 100.0	676 100.0	100.0	** _:	** 260 ** 100	585 100.0	146 100.0	100.0
Heard of Cultured Dia	monds								
Yes	320 32.0	320 100.0C	-	-	-	76 29.2	219 37.5		4 52.1
No	676 67.6	-	676 100.01		-	184 70.8	363 62.0	125 85.3	4 47.9
Don't Know	4 0.4	-	-	100.0	-		3 0.6	0.4	-
Refused	-	-	-	-	-		_	-	_
Believe that cultured	diamo	onds are	e a nat	ural p	product				
Yes	260 26.0	76 23.7		-	-	260 100.0	-	-	-
No	585 58.5	219 68.4C	363 53.7	3 85.0	-	-	585 100.0	_	-
Don't Know	146 14.6	21 6.5	125 18.5	1 3 15.0	-	-	-	146 100.0	-
Refused	8 0.8	4 1.4	4 0.6	-	-	-	-	-	8 100.0

## Marketing Research Report:

Use of the term "Cultured" for Fine Jewelry



Don Dietrich TNS phone: 215.444.9669 July 5, 2006

the sixth sense of business"

### Methodology

### Methodology

- Respondent households selected via Random Digit Dialing with quota sampling for nine census regions.
- Selection of household member to be interviewed done via "gender rotated, last birthday" method. If that person is not available at the time of the initial call, up to two callbacks attempted. This approach minimizes the effects of "at home bias" and gives us a high quality approach to generating a representative sample.
- Respondents screened for being 18 or older and relevant to the fine jewelry category:
  - reported purchasing/receiving as a gift fine jewelry in the past 3 years and/or
  - expect to purchase or receive as a gift fine jewelry in the next year
- Significance testing was conducted at the 90% confidence level.

Key Finding #1: "Thinking about different kinds of jewelry, which one kind of fine jewelry do you most associate with the word 'cultured'?" (open-ended question)

- Over half, 50.4%, of respondents said they most associated 'pearls' most with the word "cultured".
- That level is more than three times greater than is the case for 'diamonds,' which was most associated with the world "cultured" by 14.2%.
- Other answers besides 'pearls' and 'diamonds' were given much less often..no one answer was given by more than 6% of respondents.

Key Finding #2: "Which of the following kinds of fine jewelry have you ever heard of being associated with the word 'cultured'?" (closed-ended question)

- 81% of respondents associate pearls with the word "cultured".
- 45% of respondents associate diamonds with the word "cultured".
- Between 32% 34% associate rubies, emeralds and sapphires with the word "cultured".
- The youngest age group, 18-34 year olds significantly are driving the thought that Diamonds (59%), Rubies (47%), Emeralds (39%) and Sapphires (42%) are associated with the word "cultured", which are all significantly higher levels than the two older age groups 35-54 and 55-74 year olds.

• Key Finding #3: Of all of these different kinds of fine jewelry, which single one do you most associate with the term "cultured"?

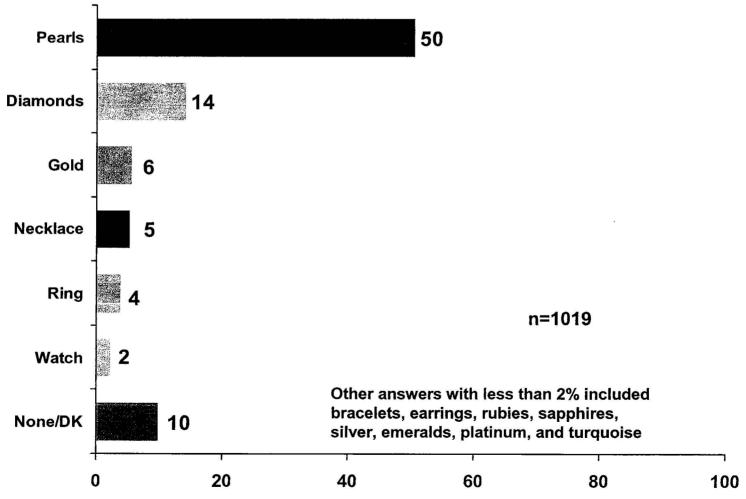
### Answer:

- 62% believe that Pearls are most associated with the term "cultured".
- 22% believe that Diamonds are most associated with the term "cultured".
- None of the other types of fine jewelry have more than 5%.

## **Detailed Findings**

### Thinking about different kinds of fine jewelry, which ONE kind of fine jewelry do you most associate with the word "cultured?" (open-ended)

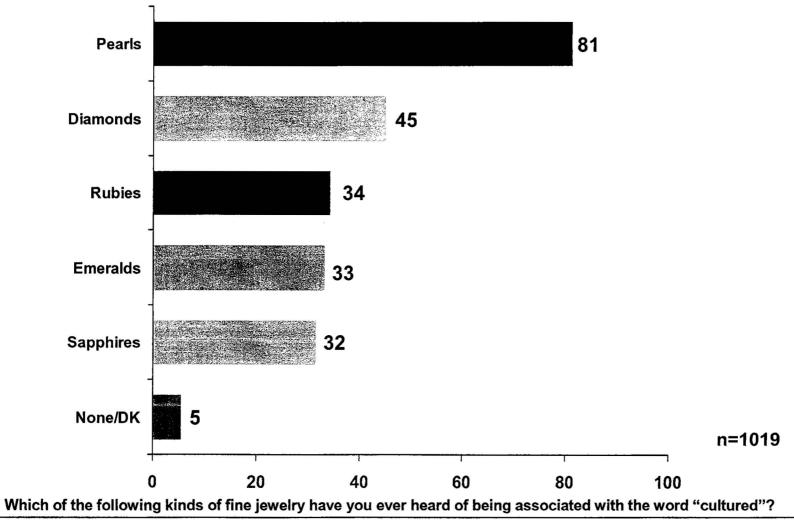
- Half of all respondents associate the word "cultured" with Pearls.
- The next highest level is for Diamonds, at 14%.



Q1

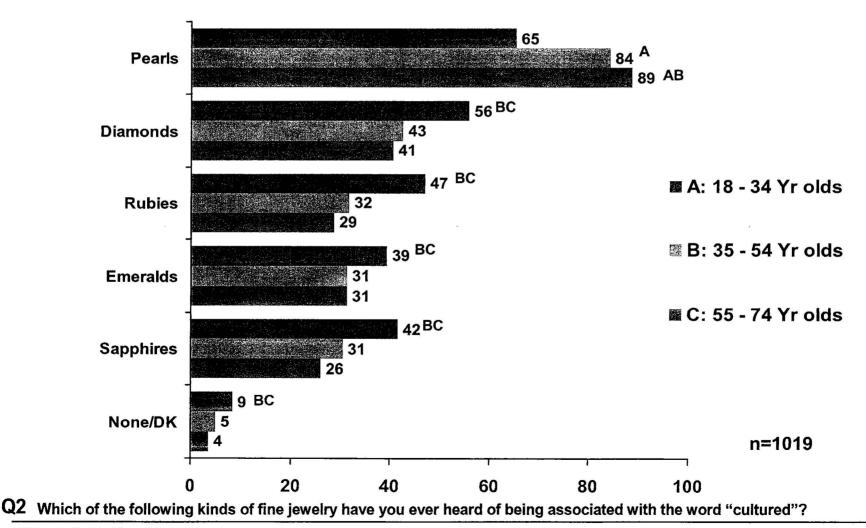
### Which of the following kinds of fine jewelry have you ever heard of being associated with the word "cultured"? (closed ended)

- More than 4 out of every 5 respondents associate Pearls with the word 'cultured', with less than 50% associating Diamonds with being 'cultured'.
- Almost a third of respondents relate Rubies, Emeralds or Sapphires with the being 'cultured'.



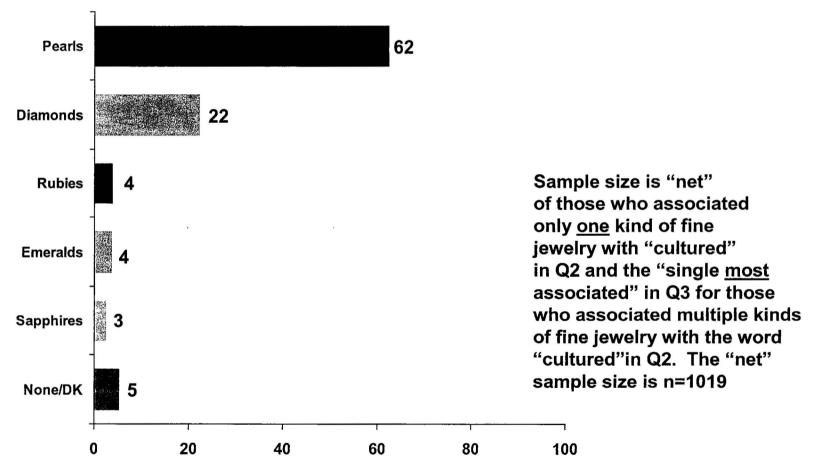
Which of the following kinds of fine jewelry have you ever heard of being associated with the word "cultured"?

• The youngest age group, 18-34 year olds, had a significantly higher level of association of the word 'cultured' with diamonds, rubies, emeralds and sapphires than both the older age groups.



Of all of these different kinds of fine jewelry, which single one do you most associate with the term "cultured"? (net of Q2 'single associations' and "most" in Q3 among those with multiple associations in Q2)

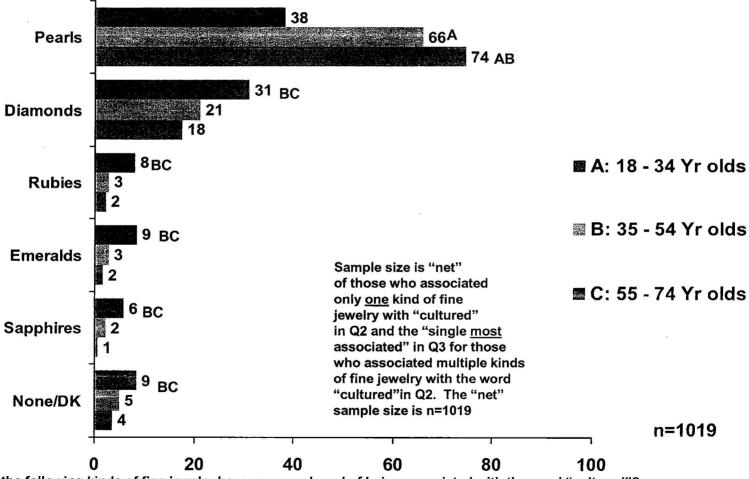
- 62% respondents most associate the word "cultured" with pearls.
- The next highest level is for diamonds, at 22%.



Q2 Which of the following kinds of fine jewelry have you ever heard of being associated with the word "cultured"? Q3 Of all of these different kinds of fine jewelry, which single one do you most associate with the term "cultured"?

Of all of these different kinds of fine jewelry, which single one do you most associate with the term "cultured"? (net of Q2 'single associations' and "most" in Q3 among those with multiple associations in Q2)

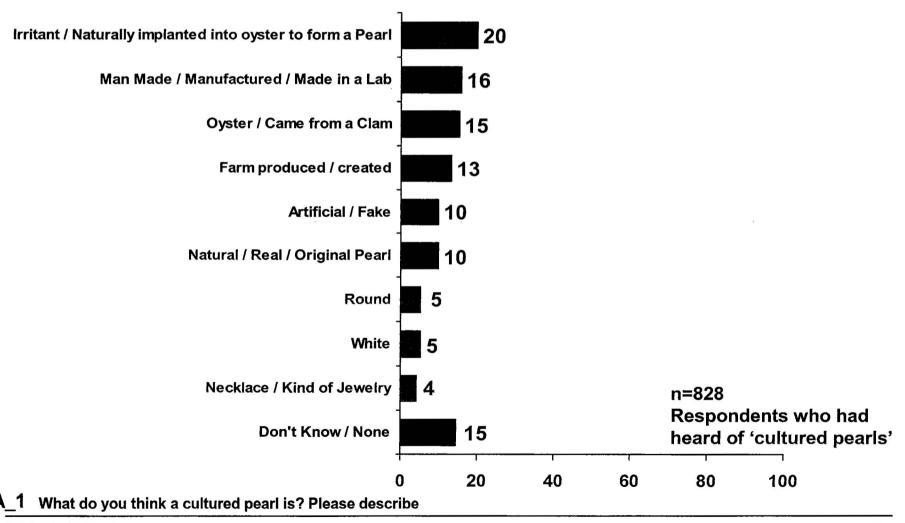
- 74% of 55-74 year olds, and 66% of 35-54 year olds most associate the word 'cultured' with pearls.
- •The youngest age group, 18-34 year olds, had a significantly higher level of "most associated" with the word 'cultured' for diamonds, rubies, emeralds and sapphires than both the older age groups.



Q2 Which of the following kinds of fine jewelry have you ever heard of being associated with the word "cultured"?
Q3 Of all of these different kinds of fine jewelry, which single one do you most associate with the term "cultured"?

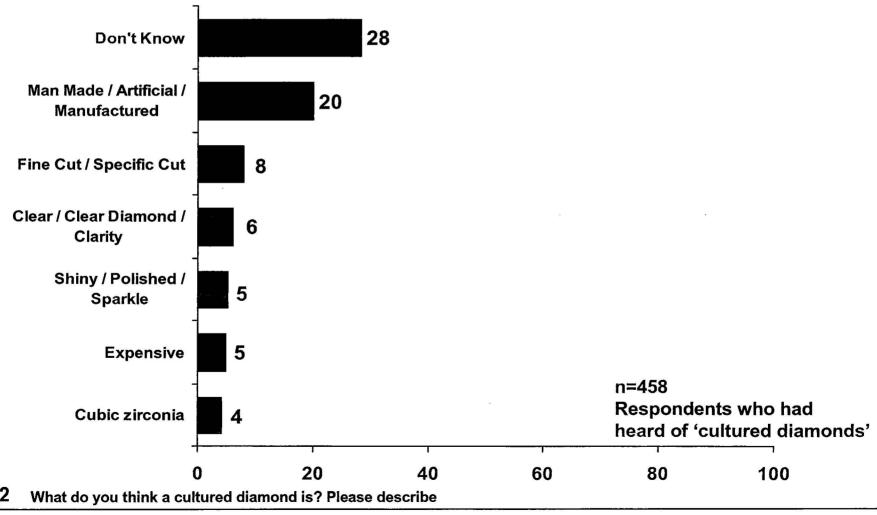
### Open-ended question: "What do you think a cultured pearl is? Please describe." (coded answers)

• The most common answers (coded) was that a "cultured" Pearl was "*irritant/naturally implanted into an oyster to form a pearl*." Next most common answers:e 16% of respondents thought it was a 'man-made' substance, while 15% thought a "cultured" pearl came from an oyster or clam.



### Open-ended question: "What do you think a cultured diamond is? Please describe." (coded answers)

- The most common answer( 28% of respondents) was "don't know."
- The next most common answers were that a cultured diamond is (coded) "man-made/ artificial/ manufactured"

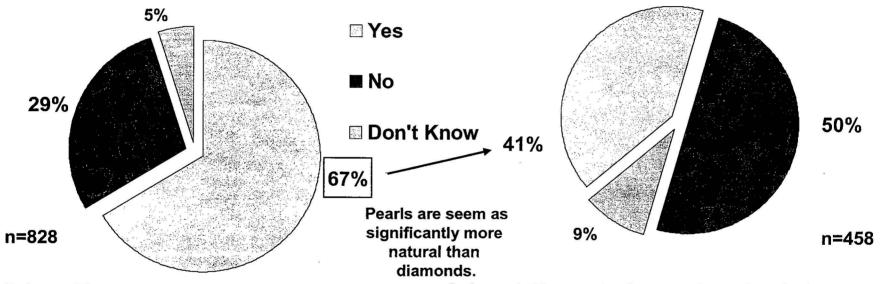


### Do you believe that a cultured pearl / cultured diamond is a natural product? (Among respondents who have heard of either)

- 67% believe that the cultured pearl is a natural product compared to 41% who believe a cultured diamond is a natural product (difference significant at 90%confidence).
- There are age differences: over half of 18 34 year olds believe that a cultured diamond is a natural product. At 90%confidence that is significantly higher than the proportion of 35-54 & 55-74 year olds.

### **Cultured Pearl - A natural product?**

### <u>Cultured Diamond - A natural product?</u>



### Cultured Pearl - A natural product? - by age

Cultured Diamond - A natural product? - by age

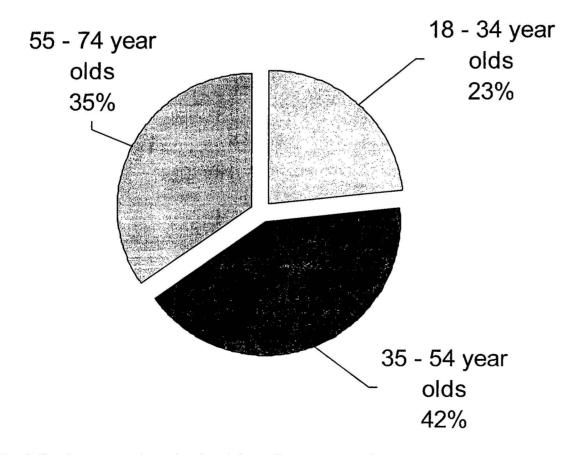
	<u>A:18-34</u>	B:35-54	C:55-74		<u>A:18-34</u>	B:35-54	C:55-74
Yes No DK	62% 35% <sup>C</sup> 3%	64% 31% <sup>C</sup> 6%	72% <sup>AB</sup> 23% 5%	Yes No DK	BC 55% 42% 3%	34% 56% <sup>A</sup> 10% <sup>A</sup>	36% 49% 15% <sup>A</sup>

Q4B Do you believe that a cultured pearl / cultured diamond is a natural product?

### Demographic profile of respondents

### **Age Distribution of Respondents**

Respondents who qualified were age 18+ and recent/anticipated acquirers of fine jewelry. The qualified respondents spanned all age groups as shown below.

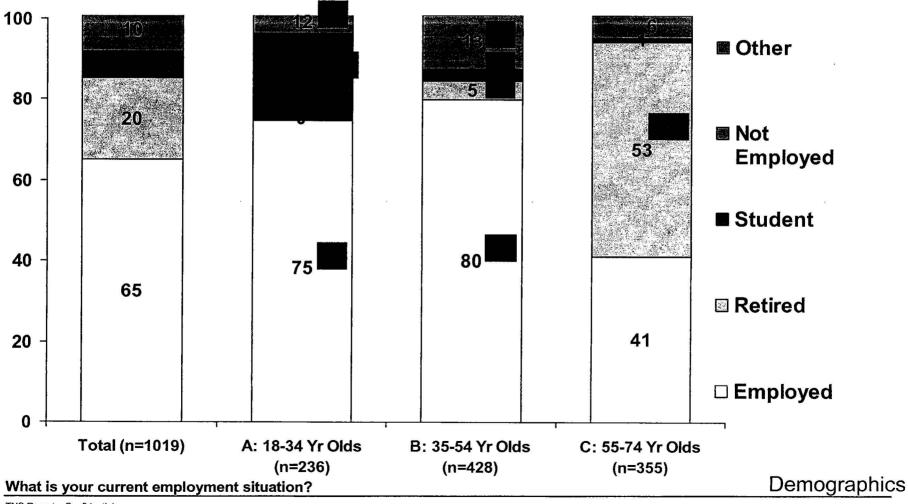


n=1019

QC What of the following age categories best describes your age?

### **Current Employment Situation of Respondents**

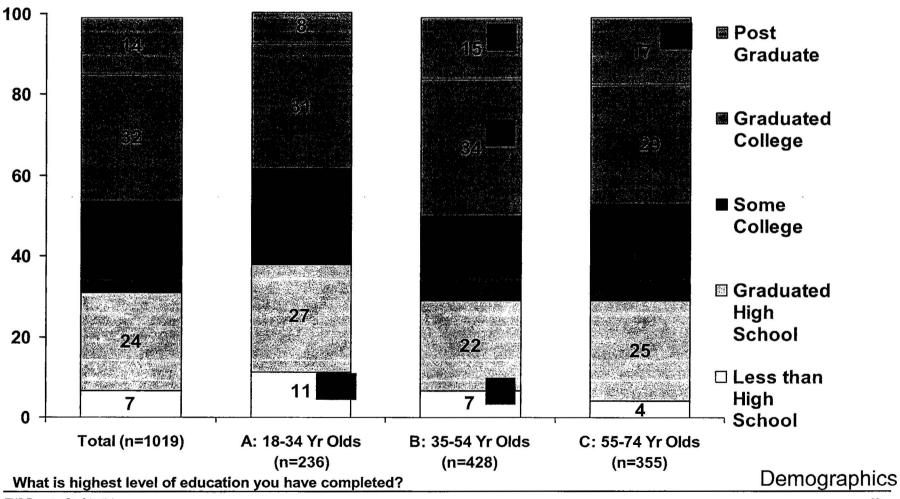
- 65 percent of respondents are employed. 20 percent are retired.
- Not surprisingly, younger respondents are more often students and older respondents are more often retired.



**Q5** 

### **Highest Level of Education of Respondents**

- The education levels of respondents spanned all levels.
- Not surprisingly, older respondents have more often completed higher levels of education.



Q6

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