# AGA Update

## JULY / AUGUST ISSUE, 1987

ACCREDITED GEMOLOGISTS =

# CAN YOU ID NATURAL PEARLS?

We all have trouble enough with natural versus synthetic IDs in our day to day work and few if any of us have the equipment to separate natural from cultured pearls. Of course none of us would issue a report stating natural origin without having an x-ray test performed, but according to those who have had a great deal of exposure to natural pearls the separation is relatively easy. Unfortunately most of us have no ready access to natural pearls for study purposes. Perhaps if we had a chance to study different shapes, sizes or varieties of natural pearls we could become familiar enough to at least know when to send them in for ID tests. Certainly when we are first learning our gemology, we wonder if we should send in every strand of pearls for ID. Now after exposure to the trade we probably know most are cultured buy maybe not always.

Through a special arrangement, Courtney Balzan, our own vice president, is offering to AGA members only, a chance to study natural pearls without purchasing. There is a variety of different shapes and sizes as well as qualities available for loan. If you would like to have a chance to study natural pearls in your own lab on your own time, please contact Cortney at (415) 924-1601 or write Cortney Balzan

P.O. Box 6007 San Rafael, CA 94903

# ECONOMIC OUTLOOK

ASSOCIATION

Periodically we compile different views on economics from various sources such as the Wall Street Journal, Newsweek, The Financial Journal, Changing Times, Chamber of Commerce reports, IRS bulletins, etc. These are summarized in general outlook form for you to quickly summarize what's going on. We have undergone some very interesting changes and events as of late and thought you

might like a brief update.

It seems relative calming of several fears and negative impacts on economic activities dominated financial discussion. The majority of fears centered around the lower value of the U.S. dollar relative to foreign currencies and its relation to trade factors and inflationary concerns. Continued lower level of participation by the consumer sector assures domestic economies will remain sluggish. Recent upward revision of first quarter real GNP grown to 4.8% from the earlier 4.4% only gives credibility to a significantly slower second quarter. Upward revisions reflected additional inventory building to \$40.7 billion compared to the original estimate of 2.5%. Relationships of rising inventories with falling sales has resulted in lower production schedules of manufactured goods.

The encouraging aspect is a direct result of recent strengths in the dollar which has risen by over 8% and penetrated the 150 yen level. Inflationary fears from declining dollar values have become more damaging politically for net reduction of trade imbalance. Import costs increased and were a primary reason for inflation rising to 5% from 4%

the first six months of the year. Domestic producers used the import price increase as an umbrella to raise their own prices rather than trying to regain market share. However on a more positive note the Producer Price Index only rose 0.2% in June following an increase of 0.3% during May.

Alan Greenspan has generally received favorable reaction as he takes the helm of the Fed and he appears to favor continuing the Fed's role in controlling inflation which will provide a favorable environment for resuming reduction of interest rates. Most economists do not see consumers becoming stronger contributors until the full tax reduction package is in effect next year and expect increases in inflation to be nil. Annualized personal income grew 2.4% during the first six months of 1987 compared to inflationary gains of 5% as measured by the CPI. Historically high debt levels held by consumers have a negative impact on real income growth. Further even though unemployment dropped to 6.1% in June from 6.3% the previous month, continuation of employment gains is unlikely. Auto sales declined 12% in July, retail sales declined 0.6% during May and housing related statistics give further credibility to a weakened view of consum-Unless the Fed were to tighten monetary policy beyond reasonable means a recession is remote. The dollar amount of trade deficit is not improving due to higher import costs and the number of units imported is gradually falling. With low domestic capacity and utilization rates below 80%, unit growth can occur without creating production pressure. It seems consumers as a sector remain weak and are largely responsible for a sluggish economy. A stronger dollar has created an opportunity for the Fed to ease and allow interest rates to fall further. The improved psychology of financial markets is apparent and may allow prime rate cuts and may allow prime rate cuts during the next short term.

Miners striking in South Africa will have a definite impact on precious metal prices and we can expect to see a rise with a potential for manipulated short term gains causing unstable markets. Diamonds remain steady and strong in demand and still somewhat short in certain sizes and qualities on the supply side. Manufacturers reported one of the best

years in many for the New York JA show and positive attitudes about the upcoming Christmas season were abundant. Overall to summarize, it seems we are not out of the woods yet and smart buying, reduced overhead and penny watching are crucial to survival. Those who remain flexible and maximize productivity while concentrating on customer service are likely to have a better chance at survival.

# LUXURY TAX ON JEWELRY?

If you haven't already heard, the House is considering (very seriously) a luxury tax to lower debt and reduce deficiencies in other tax bases. We are on top of this situation and have enclosed ALL of the information we have on the subject to date. It is seems lengthy we apologize, but we felt very strongly about keeping you up to date on such a key and crucial issue. This, at a time when we are all just barely getting by, seems sinful and just might be the final undoing of those just teetering on the brink. We strongly urge you read these and take any action you can muster to discourage this proposal. For a small or large operation, chain or private, family owned or corporation, this is not the time in our industry to contend with yet another blow to our small share of a diminishing disposable income dollar.

Please note that the Council of Jewelry Appraiser Organizations is taking action on our behalf. We thought you would like to see how they are spending our membership dollars. We approve, and hope you do to.

If you have comment or suggestion please let us hear from you

### NOT YET

We had intended to publish a report updating you on the activities of the Nuclear Regulatory Commission in their policy making pertaining to irradiated gem material, but unfortunately they are still in the middle of trying to decide what to do and how to handle the delicate problem at hand. You know there is sig-

nificant implications financially if the NRC were to simply pull all irradiated gems off the market. In our continued contact with the NRC over the past year and a half we can tell you they DO NOT WANT to put our industry into a tailspin and desperately seek a plausible solution. Still, our ultimate concern MUST be to the consumer who purchases the jewelry item and is at potential risk if HOT material is passed on even without prior knowledge and by mistake. Recent trade articles echo our suggestion to purchase radiation monitors and test all potentially treated material before buying and selling such items. Our most recent encounter with the NRC leads us to be suspicious of the absolute efficiency of the low cost monitors in that they are restricted in the types of rays they detect. The NRC is discovering that some rays not detected by these devices are as potentially hazardous as the detected ones.

There is no easy answer at this point and we can only wait for a full report. We will keep you as current as possible given the political restrictions in our

trying to keep informed.

### ACCREDITED LAB

We have gone to press with the new Accredited Lab applications. Very soon you will receive an application and a complete set of instructions and explanation about the AGA Accredited Laboratory program. We see a tremendous potential for those who care to participate and hope you will all take advantage of this benefit. Those who already have Accredited Labs will only need fill out a new application and forward a small renewal fee. We have made every effort to keep the costs low and reasonable on this program. Thanks to all of you who took the time to send in your comments and suggestions. We hope the revisions in this program meet with your approval.

# AGANET GETS A FACELIFT

After almost two years of operation

and growth, AGANET recently underwent a complete overhaul and facelift. We feel the board is now much easier to use and we have worked out many of the bugs we had in hardware compatability. Now 16 instead of 8 bit, the board is quicker, has more areas for SIG's (special interest groups), has bigger capacity for upload and download capabilities. We have upgraded from a 1200 to a 2400 baud ceiling on transmission. In short, it's the best small board around and even better it's free to members (except the cost of the phone call). The board runs 7 days a week, 24 hours a day (except late night downtime encountered occasionally for maintenence). If you haven't used the board yet you're missing a vital communication tool.

We have enclosed instructions for use of the new board. Let us know what you think!

By the way we are sorry to say that our chair of communications Rod Wagner is no longer able to serve as chair of the committee. He has had new developments in his career and moves on to much bigger projects with little time left to help run his committee. We would like to thank Rod for his tremendous contributions to AGA and AGANET over the past two years and offer our very best wishes for continued success in his future. We hope he will stay in touch and at least consult on some of our more difficult computer challenges.

If anyone knows someone or would like to take on the challenge of the Communication Committee, please contact Robert Rosenblatt as soon as possible. We hope to continue offering the latest and most advanced "state of the art" applications of computers in gemology and hope to bring our members into the 21st Century with confidence in using computer technology. THANKS FOR USING AGANET!

### EDITORS NOTE

Stay tuned for lots of new information in your next "UPDATE". We welcome your contributions and thank those who contributed for this issue.

# PRESS BREAKS

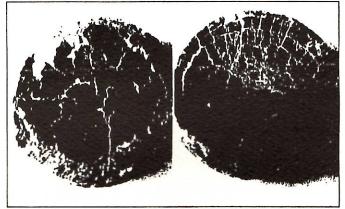
### A girl's best friend?

Remember the character in the tight blue body suit with the red cape squeezing a lump of coal in his hand, turning it into a diamond? Well, we haven't been able to duplicate that feat yet, but scientists at the Center for Explosives Technology Research (CETR), New Mexico Tech, Socorro, N.M. have succeeded in using the shock wave generated by an explosion to compress diamond powders into polycrystalline diamond. The result: a diamond (made without any binding materials) that is 85% as hard as natural diamond. This is said to be the world record for artificial pure sintered diamond.

Carbonardo and ballas, natural polycrystalline diamond masses having extensive diamonddiamond bonds, are very tough (superior to single-crystal diamond) and very hard. These materials have been used widely as cutting tools, drill bits, and wiredrawing dies due to their excellent mechanical properties. However, natural polycrystalline diamonds are limited in amount, and it also is difficult to shape and hold them in some applications. This led researchers to attempt to make strong polycrystalline diamond by high-pressure and hightemperature compaction.

In the process, synthetic diamond powders are enclosed in a stainless steel capsule and a shock wave from an explosion drives an iron plate against the capsule at a velocity up to 3 km/sec (10,000 ft/sec). The pressure generated by the shock wave is nearly 100 GPa (one-million atm).

The new technology was developed by visiting professor Akira B. Sawaoka (from the Tokyo In-



stitute of Technology) and CETR research associate Tamotsu Akashi. So far, polycrystalline diamonds only a few millimeters in diameter have been produced; however, researchers say that larger diameter diamonds are possible with the present technology.

Synthetic diamonds are industrialquality diamonds consisting of numerous crystals, whereas a gem quality diamond is a single crystal. Professor Sawaoka sees one application for the extremely hard and tough pure synthetic diamonds as machining tool bits. Another potential use is in electronic devices where the diamond's very high thermal conductivity is an advantage.

In a separate experiment, visiting researcher M. Yoshida

Compacted diamond discs contain numerous cracks; bright regions correspond to areas where diamond particles or agglomerates come out during grinding or polishing.

(now at the National Chemical Laboratory for Industry, Japan) successfully produced polycrystalline diamond by another technique, at pressures exceeding 100 GPa (one-million atm).

Research at CETR focuses on explosive techniques and their application to industrial processes. CETR is one of five Centers for Technical Excellence in New Mexico, which were created to support industrial growth and economic development in the state.

— The Editors



#### AMERICAN WATCH ASSOCIATION

1201 Pennsylvania Avenue, N.W.

P.O. Box 464

Washington, D.C. 20044

(703) 759-3377

Emilio G. Collado III

Executive Director

July 1, 1987

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Mr. Neil H. Cohen President Accredited Gemologists Association 99 Pratt Street Hartford, Conn. 06103

Dear Mr. Pratt:

I am writing on behalf of the American Watch Association, Jewelers of America and Manufacturing Jewelers and Silversmiths of America to urge your organization to join us in opposing a luxury excise tax on watches and jewelry items.

The staffs of the Ways and Means and Joint Taxation Committees have, as anticipated, included a luxury tax on watches and jewelry among the "possible options" to raise Federal revenues being considered by the House Ways and Means Committee. The option mentioned in the staff report (see attached exerpts) would impose a 10 percent retailer excise tax on the value of jewelry (including watches and clocks) and precious gemstone in excess of \$100. If adopted, the tax would be \$10 on a \$200 watch and \$19 on a \$2,000 The tax is estimated to raise only \$200 million in 1988 and \$1.1 billion in the 1988-90 three-year period. (By contrast, an excise tax on consumer electronic goods would bring in \$7.3 billion during that period.)

Excise taxes will be the subject of hearings before the Ways and Means Committee on July 7-9. AWA, the Jewelers of America (JA) and the Manufacturing Jewelers and Silversmiths (MJSA) have all requested an opportunity to testify publicly in opposition to the tax.

I am coordinating the jewelry industry effort in Washington to nip this excise tax in the bud before it blooms into a serious legislative proposal. Our strategy calls for:

- o Grassroots letter writing campaign to every member of the Ways and Means Committee. (See attached 1-page argument sheet for key ideas, but use your own words.)
- o In-district visits with your Congressman. (See attached membership list of Ways and Means Committee.)
- o Washington visits with your Congressman (most important since in-district visits will be harder to arrange).

A concerted effort can stop a luxury tax now. Once enacted, an excise tax may not be repealed for years. (The 1941 tax on watches was repealed only in 1965 and was increased from 10 percent to 20 percent in the Fifties.) Please help in the following ways:

- Write your Congressman. (Call me if you need his address.)
- o Try to <u>visit him</u> over Friday-Monday long weekends <u>in his home district</u>, or visit him in Washington.
- o Write the Ways and Means Committee before July 15:

Mr. Robert J. Leonard Chief Counsel Committee on Ways and Means U.S. House of Representatives 1102 Longworth House Office Building Washington, D.C. 20515

- o <u>Urge your suppliers/vendors/customers to write</u> members of the Ways and Means Committee.
- o Please send copies of all your correspondence to:

Toby Collado American Watch Association 1201 Pennsylvania Avenue, N.W. P.O. Box 464 Washington, D.C. 20044

Sincerely yours,

Emilio G. Collado III

Enclosure

#### **Committee on Ways and Means**

1102 Longworth House Office Building, Washington, DC 20515

(202) 225-3625

Jurisdiction: (1) Customs, collection districts, and ports of entry and delivery; (2) Reciprocal trade agreements; (3) Revenue measures generally; (4) Revenue measures relating to the insular possessions; (5) The bonded debt of the United States (subject to the last sentence of clause 4 (g) of House Rule X, mandating the submission of annual committee reports to the Committee on the Budget); (6) The deposit of public moneys; (7) Transportation of dutiable goods; (8) Tax-exempt foundations and charitable trusts; (9) National social security, except (a) health care and facilities programs that are supported from general revenues as opposed to payroll deductions, and (b) work incentive programs.

Ratio: 23/13.

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b

#### [JOINT COMMITTEE PRINT]

#### DESCRIPTION OF POSSIBLE OPTIONS TO INCREASE REVENUES PREPARED FOR THE COMMITTEE ON WAYS AND MEANS

BY THE STAFF OF THE

JOINT COMMITTEE ON TAXATION

WITH THE STAFF

OF THE

COMMITTEE ON WAYS AND MEANS



JUNE 25, 1987

U.S. GOVERNMENT PRINTING OFFICE WASHINGTON: 1987

74-257

JCS-17-87

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#### 4. Luxury Excise Taxes

#### Present and Prior Law

Federal excise taxes have not been levied on a broad range of consumer items, whether or not such items could be called luxury items, since enactment of the Excise Tax Reduction Act of 1965.

Before enactment of the 1965 Act, retail, wholesale, and manufacturers taxes covered many consumer items without any exemption of items priced below threshold levels. Examples of the excise taxes, which were repealed in 1965 or later legislation, are listed

#### Manufacturers excise taxes

1. 10-percent tax on automobiles; 8-percent tax on automobile

parts and accessories.
2. 10-percent tax on radio sets, television sets, phonographs, records, and other analogous items. (The same tax rate also applied to self-contained air-conditioning units, cameras, lenses and film, and business machines.)
3. 5-percent tax on film projectors.

#### Retail excise taxes

1. 10-percent tax on jewelry, various precious and semi-precious stones, watches, clocks, sterling silver, silver-plated, gold, or gold-plated holloware and flatware, and other items.

2. 10-percent tax on articles made of fur on the hide or pelt, and on articles with fur as the most valuable component.

3. 10-percent tax on toilet preparations (which included cosmetics as well as perfumes), handbags, and luggage.

#### Possible Proposals

1. Ad valorem excise taxes could be reimposed on the articles

 Ad valorem excise taxes could be reimposed on the articles that were subject to excise taxes under prior law.
 In addition to the prior-law taxes, taxes could be imposed at a 10-percent rate on the following articles:
 a. Boats and yachts;
 b. China and crystal;
 c. Airplanes, other than those used for the commercial transportation of passengers or cargo for hire;
 d. Electronic entertainment and recreational devices (e.g., VCRs, video cameras, recording tape and other accessories, VCRs, video cameras, recording tape and other accessories,

e. Electronic or mechanical coin-operated amusement devices; and

f. Social club dues.

(45)

46

3. Thresholds could be established for certain articles, with the taxes applying to the excess of price above the established threshold. For example, the tax on automobiles could apply to the excess of the price over \$20,000, and the tax on boats and yachts could apply to the excess of the price over \$15,000.

Under all three proposals, whether the taxes would be imposed at the manufacturer or retail level would be determined based on the relative ease of administering each tax.

#### Pros and Cons

#### Arguments for the proposals

 Excise taxes have a direct effect on reducing consumption of the taxable items, and thus encourage savings.
 Properly targeted, luxury excise taxes would affect wealthier individuals to a greater degree as a percentage of disposable income than the poor. Inclusion of such taxes in a revenue-raising taxes are proposed to the proposed such a package more progressive in its content. package would help render such a package more progressive in its impact.

#### Arguments against the proposals

Arguments against the proposals

1. Administrative cost-revenue ratios associated with these excise taxes would be very high relative to the cost-revenue ratio of income taxes. Relative administrative costs are higher for retail excise taxes than for manufacturers excise taxes because of the greater number of retailers, and thus a greater number of returns to process. However, the determination of price in many transactions below the retail level is determined on the basis of negotiations or arbitrary prices set between manufacturers and wholesalers owned by the same person rather than set prices applicable to purchasers generally; taxes levied on such transactions tend to create even greater distortions in relative prices.

2. There are few objective standards available to use in deciding which articles are luxury goods.

which articles are luxury goods.

#### 47 Revenue Effect [Fiscal years, billions of dollars]

Proposal 1	1988	1989	1990	1988-90
a 10% tax on value of autos in excess of \$20,000	0.3	0.4	0.4	1.2
b. 10% tax on value of boats, yachts in excess of \$15,000	0.1	0.1	0.1	0.3
c. 10% tax on value of general aviation	0.2	0.3	0.3	0.8
d. 10% tax on value of furs	0.1	0.1	0.1	0.2
ment, VCRs, video cameras, and re- lated products)	1.5	2.8	3.0	7.3
f. 10% tax on value of jewelry and precious gematones in excess of \$100	0.2	0.4	0.4	1.3

<sup>&</sup>lt;sup>1</sup> All proposals would be effective on October 1, 1987, with appropriate floor stocks taxes being imposed.

#### July 1987

#### AN EXCISE TAX ON JEWELRY SHOULD BE REJECTED

- Revenue Estimates. An excise tax on jewelry would raise a relatively small amount of revenue. In fact, the 1987 Joint Committee Staff Report estimates that a 10 percent tax on jewelry over \$100 in value would raise only \$200 million in 1988. This would meet only one percent of the Ways and Means Committee's 1988 revenue target.
- O Costly to Administer and Burdensome to Small Business.

  A retail tax on jewelry sales would be costly to administer, both to the IRS and the industry. The burden of collecting, recording and transmitting the tax on literally millions of transactions would fall on hundreds of thousands of retail establishments, many of which are mom-and-pop stores.
- Discrimination. An excise tax on jewelry, but not on all consumer products, would be unfair and discriminatory. A \$101 watch or a \$250 engagement ring cannot fairly be called a luxury item. In today's world, most people find watches and jewelry to be a necessity. Certainly, everyone purchases jewelry, not just the wealthy. Items like caviar, silk scarves, English shoes and designer dresses are luxury items more than moderately priced jewelry.
- Economic Distortions. Unless all consumer products are taxed, an excise tax on jewelry will cause consumers to switch to purchases of other items that are not subject to the tax. Any tax which causes a decline in the U.S. market for jewelry will inevitably result in a further decline in employment in an industry which has lost 7,500 jobs over the past 10 years.
- Opposition to Jewelry Excise Tax. It is precisely because of the burden, inefficiency and discriminatory nature of a jewelry excise tax that Congress repealed it in 1965. Congress should not take two steps backward and reinstitute it at the expense of particular industries.

#### ( ) August 1987

## SAMPLE

(A)
Ms. Mary McAuliffee
Minority Chief of State
United States Senate
Committee on Finance
Room G-08
Dirksen Senate Office Bldg.
Washington, DC 20510

(B)
Ms. Laura Wilcox
United States Senate
Committee on Finance
Room SD-205
Dirksen Senate Office Bldg.
Washington, DC 20510

(C & D)
Your Senator and
Congressman

Dear (A) (B) (C) (D) as appropriate:

I am writing this letter because of my great concern relative to the Joint Committee on Taxation and the Committee on Ways and Means option which would place a luxury excise tax on watches and jewelry items. I believe that such a tax should be rejected because:

- a) An excise tax on jewelry would raise a relatively small amount of revenue. If fact, the 1987 Joint Committee Staff Report estimates that a 10 percent tax on jewelry over \$100 in value would raise only \$200 million in 1988. This would meet only one percent of the Ways and Means Committee's 1988 revenue target.
- b) A retail tax on jewelry sales would be costly to administer, both to the IRS and the industry. The burden of collecting, recording and transmitting the tax on literally millions of transactions would fall on hundreds of thousands of retail establishments, many of which are "mom-and-pop" stories.
- c) An excise tax placed only on jewelry, rather than <u>all</u> consumer products, would be unfair and discriminatory. A \$150 watch or a \$500 engagement ring cannot fairly be called a luxury item. In today's world, most people find watches and jewelry to be a necessity. Certainly. everyone purchases jewelry, not just the wealthy. Items like caviar, silk scarves, English shoes, designer dresses and the like seem to be more representative of luxury items than moderately priced jewelry.
- d) Unless all consumer products are taxed equally, an excise tax on jewelry will cause consumers to switch to the purchasing of other items that are not subject to the tax. Any tax which causes a decline in the U.S. market for jewelry to the benefit of other markets will inevitably result in a further decline in employment in an industry which has lost 7,500 jobs over the past 10 years.
- e) It was precisely because of the burden, inefficiency and discriminatory nature of the jewelry excise tax that Congress repealed it in 1965. Congress should not take two steps backward and reinstitute it at the expense of particular industries.

I strongly urge the Joint Committees to reject the concept of a luxury tax on watches and jewelry because of the above mentioned considerations.

Sincerely,

MAILGRAM SERVICE CENTER MIDDLETOWN, VA. 22645 15AM



4-026681S196002 07/15/87 ICS IPMRNCZ CSP SCLB 1 8014672105 MGM TDRN SALT LAKE CITY UT 07-15 0209P EST

PROBERT ROSENBLATT 2736 COMMONWEALTH AVE SAL LAKE CITY UT 84109

THIS IS A CONFIRMATION COPY OF THE FOLLOWING MESSAGE:

B014672105 MGMB TDRN SALT LAKE CITY UT 40 07-15 0209P EST ZIP
CHAIRMAN DAN ROSTENKOWSKI COMMITTEE ON WAYS
AND MEANS
1102 LONGWORTH HOUSE OFFICE BLDG
WASHINGTON DC 20515
PER EXCISE TAX ON JEWELRY 10 PERCENT JEWELRY/WATCH EXCISE TAX IS
DESCRIMINATORY, EXCESSIVE, AND DEVASTATING. JEWELERS ARE STRUGGLING
TO SURVIVE AS IS. MY MEMBERSHIP AND I STRONGLY OPPOSE SUCH ACTS OF
INDESCRETION. DON'T KILL SMALL BUSINESS. URGE YOU RECONSIDER OPTIONS.
ROBERT L ROSENBLATT M.G.A.
PRESIDENT ACCREDITED GEMOLOGIST ASSOCIATION

14:21 EST

MGMCOMP

# COUNCIL OF JEWELRY APPRAISER ORGANIZATIONS OFFICE OF SECRETARY-TREASURER P.O. BOX 6558 ANNAPOLIS, MD 21401-0558

4 August 1987

From : CJAO - Acting Secretary-Treasurer

To : Council Representatives

Subject: Proposed Luxury Tax on Watches and Jewelry

Robert Rosenblatt (AGA) brought this subject to my attention as a possible issue in which the CJAO could contribute to the industry as a whole.

After talking with Mr. Collado, Executive Director of the American Watch Association, he provided me with copies of the pertinent literature relating to this tax issue.

Based on telephone discussions with three of the four Council Members I was able to contact, I have written a CJAO letter to the Senate Finance Committee on behalf of our approximate 2500 members, asking that such a discriminatory tax bill not be passed. A copy of the CJAO letter will be forwarded to you under separate correspondence.

The purpose of this multiple address letter is to provide each of you with the enclosed information obtained from Mr. Collado as well as to provide a proposed form letter which each organization should urge each of its members to mail to their congressman, as well as to the two key Senate Finance Committee persons listed on the sample letter. These letters should be sent to arrive not later than 17 August 1987.

Sorry for the rush due date of 17 August, but I did not find out about this until 27 July, the Monday after my weekend return from the NYC symposium.

Yours for better gem and jewelry appraising, I remain,

Sincerely,

Acting Secretary-Treasurer

Council of Jewelry Appraiser Organizations

## COUNCIL OF JEWELRY APPRAISER ORGANIZATIONS OFFICE OF SECRETARY-TREASURER P.O. BOX 6558 ANNAPOLIS, MD 21401-0558

4 August 1987

Ms. Laura Wilcox United States Senate Committee on Finance Room SD-205 Dirksen Senate Office Building Washington, DC 20510

Dear Ms. Wilcox:

I am writing this letter on behalf of the Council of Jewelry Appraisal Organizations and the approximate twenty-five hundred persons it represents through its member organizations; the American Society of Appraisers, the Accredited Gemologist Association, the Gemological Appraisal Association, and the National Association of Jewelry Appraisers.

We are greatly concerned about the Joint Committee on Taxation and the Committee on Ways and Means option which would place a luxury excise tax on watches and Jewelry items. We believe that such a tax should be rejected because:

- a) An excise tax on jewelry would raise a relatively small amount of revenue. If fact, the 1987 Joint Committee Staff Report estimates that a 10 percent tax on jewelry over \$100 in value would raise only \$200 million in 1988. This would meet only one percent of the Ways and Means Committee's 1988 revenue target.
- b) A retail tax on jewelry sales would be costly to administer, both to the IRS and the industry. The burden of collecting, recording and transmitting the tax on literally millions of transactions would fall on hundreds of thousands of retail establishments, many of which are "mom-and-pop" stories.
- c) An excise tax placed only on jewelry, rather than <u>all</u> consumer products, would be unfair and discriminatory. A \$150 watch or a \$500 engagement ring cannot fairly be called a luxury item. In today's world, most people find watches and jewelry to be a necessity. Certainly, everyone purchases jewelry, not just the wealthy. Items like caviar, silk scarves, English shoes, designer dresses and the like seem to be more representative of luxury items than moderately priced jewelry.
- d) Unless <u>all</u> consumer products are taxed equally, an excise tax on jewelry will cause consumers to switch to the purchasing of other items that are not subject to the tax. Any tax which causes a decline in the U.S. market for jewelry to the benefit of other markets will inevitably result in a further decline in employment in an industry which has lost 7,500 jobs over the past 10 years.
- e) It was precisely because of the burden, inefficiency and discriminatory nature of the jevelry excise tax that Congress repealed it in 1965. Congress should not take two steps backward and reinstitute it at the expense of particular industries.

We strongly urge the Joint Committees to reject the concept of a luxury tax on watches and jewelry because of the above mentioned considerations.

Sincerely,

Secretary Treasurer Council of Jewelry Appraisal Organizations

RED BERYL by Dana Richardson

Red Beryl is unusual - a stone most jewelers and many gemologists have never seen. It ranges in color from a fine ruby red to a bright pink similar to fine

pink sapphire.

I became interested in this gem mainly because it is found almost exclusively in Utah, where I live. The mines are located in an area of central Utah near the Thomas mountain range where, at age 10, my first interest in gems was sparked when my mother took the family searching for topaz, which is abundant in the area (Utah topaz is usually a dark amber color when mined, but unfortunately it fades to colorless in the sunlight, so most of the specimens found in the stream beds have no color). When I was working for a gem dealer about twelve years ago I saw Red Beryl for the first time in his mineral collection and have been fascinated ever since.

The red variety of beryl seems to follow one of the characteristics of the fine green variety - emerald. Most specimens tend to be heavily included, especially the darker stones - many of them having a cloudy appearance. Most of the crystals found are quite small - rarely a stone of three carats or more (after cutting) may be seen. Most cut gems range from .10 to .50ct - the wholesale cost for stones of this size ranging from several hundred to about two thousand dollars per carat. I saw two stones at the Tucson show in 1986 of about three carats each - asking price \$15,000 per carat - I don't think they were in too big a hurry to sell them! Many of the gems are faceted locally and show fine cutting. While some stones are bright, many have a velvely look to them.

Once in a while a dealer will come through with a faceted Red Beryl for sale - occasionally a cabbed stone - but unless you're really looking for one you

may never see it.

This June I had the rare opportunity to hunt for the Red Beryl myself! This is something I have wanted to do for a long time, but as the mines are privately owned I had not had the opportunity. A local rock hounding club was invited to go down and work the claim, and to my delight they invited me to go along.

We were to meet in Delta, Utah (a two hour drive from Salt Lake) where the owners of the claim live and run various businesses, including a rock shop. From there it was a 2½ hour drive, one hour of it on dirt road, the last half hour four wheel drive only!

When we arrived at the site we found some small (approx. 4-5mm long by 2-3mm across) pieces right away - some in matrix lying in the dump area, some loose crystals lying about in the dirt - nothing gem quality, but Red Beryl just the same - we

thought it would be easy!

We picked and shoveled and sifted for about six hours (rhyolite is like cement!) - not finding too much more - but having a wonderful hunt. In the end some of the group had nice specimens, a few had small cuttable material and a few got skunked! As for me, I came home with a few very nice, although small specimens in matrix and some large pieces of rhyolite with "show" which I plan to 'disect' when I have a few spare hours. There were about 30 of us all together - all working very hard to find something! We worked three areas - whacking away at the boulders which had been loosened by the blasting, and used wire mesh sieves to try to locate loose crystals. Most of us had the best luck just picking around in the dump. I can now see why Red Beryl is so expensive - it is very scarce! When I spoke with Rex Harris, one of the mine owners, he told me that when they blast and dig they may only find 5 or 6 crystals in a week, few of them of faceting grade. They are not taking out stones of the size and quality they were a few years ago - who knows what we'll see in the future.

The following information on Red Beryl was condensed from an article from the October 1979 issue of the MINERALOGI-CAL RECORD, "The Thomas Range, Wah Wah Mountains, and Vicinity, Western Utah", by Lanny R. Ream, and an article from the Winter 1984 issue of GEMS AND GEMOLOGY, "Gem Quality Red Beryl From the Wah Wah Mountains, Utah", by James E. Shigley and Eugene E. Foord. Please reference these articles for further information and photographs.

The rhyolites of westcentral and southwestern Utah comprise one of North America's most interesting collecting regions. Superb and abundant sherry-

brown topaz crystals and brilliant red beryl are the best known species.

Henry Englemann probably made the first discovery of topaz in the area during an expedition in 1859 (Englemann, 1863), and Alling (1887) was the first to describe it. Maynard Bixby discovered the bixbyite (named in his honor) and red beryl which were described by Penfield and Foote (1897) and Hillebrand (1905) respectively.

The red beryl in the rhyolites of the Thomas and Wah Wah Ranges can be found in several localities. Beryl of any sort occuring in rhyolite is a rare type of occurence. It has been reported from San Luis Potosi, Mexico, the Black Range, New Mexico, and East Grants Ridge, Valencia County, New Mexico (Johnstone,

1953).

Beryllium occurs on the southern and western flanks of Spor Mountain, just west of the Thomas Range. The world's largest deposit of bertrandite occurs in the Tertiary sedimentary rocks of this small range. There are no other deposits of beryllium known near the Wah Wah Mountain red beryl occurence. A few light blue-green beryl crystals have been found in pegmatites in granites in the Mineral Mountains 35 miles to the northeast.

Beryl crystals vary from a pink to bright red or rasberry red color. Most of the pink crystals have a sugary texture and quartz inclusions. A few crystals are of gem quality and have been cut into faceted stones. Such stones are pink to red, but usually lack brightness.

At most locations crystals are tablet shaped, that is the c dimension is shorter that the a. Crystals have a prismatic habit inthe Wah Wah Range and at one location in the Thomas Range. They are simple and consist of only the basal pinacoid and the hexagonal prism. Tablet shaped crystals average less than 4mm across, but have been found to more than 10mm. A crystal 4mm across the c face will be only about 1.5mm along the c axis. Prismatic crystals average about 10mm long in the Wah Wah Range and occur to 25mm; in the Thomas Range they average about 4mm long and occur to 20mm.

The prismatic crystals, commonly in clusters, are concentrated along veins that are fracture-controlled, and the

tabular crystals occur in vugs. The latter occur as singles or rarely clusters free-floating or on matrix. The tabular crystals are usually weakly attached, so that matrix specimens are relatively uncommon. Prismatic crystals occur with no other minerals, but tabular crystals may be in combination with any of the other minerals. Bixbyite or topaz may be perched on a beryl crystal or a beryl crystal may be perched on a topaz, garnet or bixbyite crystal.

Red Beryl was discovered in the Wah Wah Mountains nearly 30 years ago by Larry Walker of Beaver, Utah. The mining claims (known as the Violet claims 1-8, Sec 19-30, T29S, R14W) remained inactive until they were purchased by Ed, Rex and Bob Harris of Delta, in the late 1970's. A limited supply of fine specimens is

being produced.

The prismatic crystals occur in a gray rhyolite on a knoll on the end of a ridge. In this area the rhyolite is light to medium gray and contains few cavities. Two separate occurrences are being worked, each has distinct characteristics. The beryl is pink to dark

rasberry red and bright red.

The first area worked is on the top of the ridge where a pit 15m long by 7 m wide by 5 m deep has been cut across the crest. Beryl occurs in two veins similar to those of the prismatic beryl deposit of the Thomas Range. The veins cut across the ridge, are roughly parallel and dip steeply. There is an irregular seam of yellowish-gray kaolinite in the veins. Both veins terminate against a cross cutting fracture.

Doubly terminated beryl crystals occur frozen in the rock within a few centimeters of the kaolinite seam. Crystals generally are scattered along the vein but are locally concentrated. Most are over 1 cm long, and they have been found to over 2 cm. They have a yellowish or dark core surrounded by dark pink to red or rasberry-red beryl, sometimes of gem quality. Even though they are frozen in matrix, when freed they paradoxically appear to have had an area of attachment, usually at one end.

Small flesh-colored topaz crystals occur rarely in irregular cavities. Small black specks of manganese oxide (?) are common throughout the rock. There is often a finely granular mass of the oxide

in and around a pink anhedral beryl crystal.

The second beryl occurence is about 50 m below the pit, on the end of the ridge. Crystals occur in a zone of irregular cavities, some of them possibly shrinkage cracks. These are often filled with a yellowish- to greenish-white talclike mineral. Beryl crystals are commonly covered by this massive material.

Better quality crystals occur in this zone than in the pit. They are often of a brighter red color and do not have a dark core. Larger crystals, to 2.5 cm, are more common and a few specimens consisting of several crystals on matrix have been collected. These occur projecting into the cavities and are singly terminated or have one poorly formed termination where attached. Topaz and manganese oxide specks are absent.

Crystals of beryl are uncommon and much rock must be moved to locate them in both occurrences. It is necessary to break the rock by hand into small pieces to locate specimens. The veins can be followed in the upper pit, but there is no apparent control of the cavities in the lower pit. Zones are encountered where cavities, and sometimes crystals, are numerous.

Beryl is known to occur elsewhere on the ridge, but the other veins or zones have not been explored. It is possible that several other good zones may occur. There have been reports of other red beryl occurances within several miles of this one.

In the Wah Wah Mountains the red beryl locality is the only one on claims that are specifically located as mining claims. All of the other areas appear to be open to collecting.

Among the varieties of beryl used for gemstone purposes, the rarest by far is the deep-red variety from western Utah. It has also been reported from several other places in Utah, one locality in the Black Range of New Mexico and a little known occurance in the state of San Luis Potosi, Mexico. Thus far, red beryl has not been found anywhere else in the world and appears to be unique to western North America.

While gem beryls are common in pegmatites (aquamarine, morganite) and in certain metamorphic rocks (emerald), beryls of any sort are very uncommon in rhyolites. Rhyolites are light-colored, fine-grained igneous rocks that represent the solidified products of rhyolitic magmas or ash flows. Rhyolites ordinarily lack gem minerals, but sometimes contain gem topaz and garnet. The presence of gem red beryl in such rocks in western Utah suggests some unusual conditions for gemstone formation.

The red beryl deposit is collectively referred to as the Violet Claims and is located approximately 40 km (25mi.) WSW of Milford in Beaver County.

So far, only two prominent outcrops of rhyolite within the claims area have produced red beryl. Each outcrop differs slightly in the mode of occurence and the nature of the red beryl. In the upper outcrop, the red beryl crystals occur along or within a few centimeters of several narrow, steeply dipping fractures or veins filled with later-formed oxide and clay minerals. In contrast, the crystals from the lower outcrop are found in small scattered cavities, within the solid rhyolite, or in areas of fractured and altered rhyolite.

Red beryl occurs as euhedral crystals that display typical beryl morphology. Some of the crystals are well formed, transparent, and gemmy, but most are less well formed and are translucent to opaque as a result of numerous fractures and inclusions. An elongate, prismatic crystal habit is more common than a shortened, tabular shape. No distinctive etch figures or other corrosion features frequently seen on other types of beryl crystals are apparent, although some red beryls have partially frosted surfaces. Twinned crystals have not been found, but multiple crystal groups are sometimes encountered. Individual crystals may be as much as 2.5 cm long and 1 cm wide, but they average about 1 cm x 0.5 cm. Doubly terminated crystals are relatively common but most crystals show an apparent point of attachment to the rhyolite. Crystals are commonly fractured both perpendicular and parallel to their c-axis; however fractures parallel to the c-axis are often confined to the central core of the crystal, leaving a cleaner, gemmy exterior.

Bixbyite forms prominent inclusions in some red beryl crystals. A single

grain of bixbyite sometimes occurs at the center of central edge of a doubly terminated crystal or, in the case of a crystal with a single termination, near the center of the point of attachment of the crystal to its host rock. This positioning suggests that the bixbyite may have acted as a "seed" on which subsequent crystallization of the red beryl took place.

The beryl crystals range in color from orange-red to purplish red (most commonly the latter) with medium tones and moderate saturation levels. Although most of the purplish red crystals appear to be uniform in color, a number exhibit a distinct color zonation.

Depending on the inclusions and fractures in the individual crystals, the degree of transparency varies. Red beryl has a vitreous luster that is uniform over all crystal faces and broken surfaces. No chatoyancy or asterism has been noted. There is no obvious cleavage but, as mentioned earlier, fractures are common. When broken, the material exhibits conchoidal or uneven fracture.

The measured specific gravity of 2.66-2.70 for red beryl is within the lower range of values reported for beryl. The crystals display no fluorescence when exposed to long-wave or short-wave ultraviolet radiation.

Red beryl is optically uniaxial negative with refractive indices that are among the lowest values known for beryls, E=1.564-1.569, W=1.568-1.572 and a birefringence of about 0.007. The crystals examined have a pronounced pleochroism, with E= purplish red and W= orange-red to red. The E spectrum has absorption bands at 560 and 425 nm, while the W spectrum has bands at 810, 530, 480 and 425 nm.

The composition of these crystals is unique among beryls. In terms of minor elements, red beryl is relatively rich in Mn, Ti, Zn, Sn, and Li, and low in Na and Mg, as compared to other beryls. Whereas most beryls contain some water-Sinkankas (1981) reported beryl analyses with water contents up to 4 wt.%-the red beryls are noted for their virtual absence of water. An analysis of one red beryl sample gave a value of only 0.36 wt.% water.

In addition to the minor elements mentioned above, the Wah Wah red beryl

contains significant amounts of B, Nb, Pb, Sc, Cs, Zr, Ga, and Rb-most of which (excluding Cs and Rb) are generally absent in beryls from other geological environments. The content of the common alkali elements (K, Na, Li) in red beryl is very low in comparison to other beryls.

Several types of inclusions are present in red beryl. Some are typical of inclusions in gem beryls, while others seem unique to red beryl and its particular environment of formation. Healed fractures-in the form of "fingerprints"as well as unhealed fractures are quite common, especially along the central portions of the crystals or along color-zone boundries. Two-phase inclusions of unknown identity are frequently observed along flat planes, and groups of the smaller two-phase inclusions often form flat or curved "fingerprint" patterns. Also observed in several red beryl crystals were well-formed "comet-tail" inclusions that trail behind the edges of the fingerprint-like patterns. These are probably a result of directional growth disturbances caused by the inclusions that they trail behind. Distinct color zoning and growth features are also frequently seen in red beryl. Finally, various solid inclusions are present-in particular quartz and bixbyite.

The identification of red beryl should present little difficulty for the jeweler. Other common red gem materials (ruby, spinel, garnet, tourmaline, zircon) have basic gemological properties that differ sufficiently from those of red beryl. The R.I., S.G., color, and absorption spectrum of red beryl are quite diagnostic.

The red color of these crystals does not seem to be affected by heating to temperatures of several hundred degrees centigrade for an extended period.

While only a limited number of red beryl crystals recovered from the Violet Claims have been suitable for cutting, those that have been faceted exhibit a spectacular color. Recent mining for gem material has been carried out entirely on the surface by several individuals using earth-moving equipment and some blasting. For the most part, gem crystal recovery involves breaking up promising pieces of rhyolite one at a time in

the search for red beryl. The current mining operation generates a sufficient number of crystals to produce 80-100 faceted stones per year, a level that is likely to continue for the foreseeable future. Cut stones are generally less than 0.5 ct, with an average of 0.15 ct. However, stones weighing several carats have occasionally been cut. Most of the red beryl crystals produced at the Violet Claims find a ready market as mineral specimens.

As with certain other gem minerals, the coloration of red beryl is primarily due to trace elements incorporated within the beryl crystal structure. In the case of red beryl from the Thomas Range, manganese is the principal coloring agent. Iron and titanium do not seem to play a significant role. The spectrum of red beryl is related to that of pink morganite, whose paler color is also attributed to this same element. Differences in the intensity of color between red beryl and morganite could be due to a higher level of manganese in the former (by two or three orders of magnitude), or to differences in the valence state of this element.

The red beryl crystallized from a gas or vapor phase given off by a rhyolitic magma as it was cooling after having been erupted from volcanic centers. Crystalization under these conditions and from this type of host rock resulted in the unusual chemistry of red beryl, which in turn provided for the distinctive color as well as other physical and optical properties.

#### EXCERPS FROM TRADE PUBLICATIONS

NATIONAL JEWELER MAY 1, 1987 by Young McQueen

GEMSTONE PRICES SKYROCKET AS ASIANS SCOOP UP SUPPLY Page 1

The premise is that due to rising value of the Yen the value of gemstones in US dollars has risen. This seems simplistic; However, the U.S. market is so large that prices historically have not been able to rise greatly and stay there if the U.S. market does not support the

new levels. Time will tell.

GIA PROMISES GEM GRADING; DEALERS VOICE OPPOSITION Page 52

Beginning September 1, GIA will begin adding nomenclature from its colored stone grading system. Many have been wanting this for years and, of course, some don't want GIA to get into the field at all.

GIA promises a full-blown colored stone quality report promised for 1988.

U.S. MANUFACTURERS BALK AT TREATMENT DISCLOSURE Page 61

A survey by National Jeweler indicated that only one in seven U.S. jewelry manufacturers will disclose treated stones to their clients unless forced to by law.

NATIONAL JEWELER MAY 16, 1987

JVC BLASTS SAKS' NEW CATALOG FOR DECEP-TIVE GEMSTONE ADS Page 1

Saks is selling a triplet of synthetics and glass for the real thing.

LETTERS: WHETSTINE DISPUTES EXPERT'S OPINION OF HUGE SAPPHIRE and RESPONSE BY JOHN WHITE, SMITHSONIAN INSTITUTE

The real question is how someone like Whetstine can get the attention of a national institution such as the Smithsonian. If he keeps at it, his junk sapphire will become worth a lot of money because of the controversy itself. It will have provenance.

NATIONAL JEWELER JUNE 16, 1987

DIAMOND COLLECTION GREY MARKET SEIKOS REALLY CZ, SAYS JVC Page 1

Some watches sold by World Time in Miami contain CZ instead of the promised diamonds.

STILL UNDER FIRE, PERLSTEIN VOWS TO BE PHILLY'S #1 AGAIN Page 1

The real revelation here is that after the strong case brought by the government against this thief he is back in the jewelry business. It must make his honest competitors sick at the lack of teeth in the governments enforcement capabilities in this area.

GIA'S NEW DIAMOND GRADING DOESN'T CUT IT: AGS JEWELERS Page 1

APPRAISAL SCAM ENDED BY COURTS Page 58

In Chicago an appraiser was ordered to pay \$34,000 to claimants over deceptive appraisals.

LAPIDARY JOURNAL JUNE, 1987

This issue is devoted to opals

GEM TREATMENT: CORDIERITE, ALIAS DICHROITE, IOLITE, AND WATER SAPPHIRE
Page 17

Another interesting article by Dr. Pough-- must reading

INCLUSION OF THE MONTH: SURFACE DIFFUSION Page 18

Good photos by Ted Themelis

QUERETARO OPALS Page 20

 $\begin{tabular}{ll} \mbox{Good survey article on these Mexican} \\ \mbox{opals} \end{tabular}$ 

VIRGIN VALLEY Page 33

Good background information

THE BLACK OPALS OF LIGHTENING RIDGE Page 49

The article is geared to taking a trip to Lightening Ridge.

# SYNTHETIC DIAMONDS- HOW CAN WE TELL?

You have all read with great interest, the news on the new synthetic diamonds being released on the market and I'm sure like the rest of us you wonder; How big a problem will this new synthetic be to identify? First rubies that seem impossible and NOW THIS, diamonds...xx@@! Well fear not. It seems that identification is not impossible and really not even difficult. In our efforts to continue bringing you the best ongoing gemological education anywhere, we are negotiating to bring a representative from the Sumitomo Company (the Japanese company producing the new synthetics) to Tucson in February '88 to address the characteristics of this new product. It also seems that the Russians and the Americans have discovered a way to make big diamonds out of lots of small ones. These "reconstituted" diamonds are made by putting diamond powder in stainless steel capsules and introducing a shock wave from an explosion which drives an iron plate against the capsule at a velocity of 10,000 feet per second. The pressure generated is nearly one million atmospheres and a new large single diamond is formed in the process. We have enclosed a reprint of an article (though outside our trade) on this process. We will pursue this new development and keep you posted.