

# The Opal Express

American Opal Society  
 P.O. Box 4875  
 Garden Grove, CA 92842-4875



**Volume #36 Issue #10  
 October 2003**

**In This Issue:**

President's Message	3
October Snippets	3
Announcement:	3
Precious Opal In Volcanic Sequences	4
"Members Only" Area on Website	6
Opal Workshop	6
Fair Market Value:	6
First Base	8
Opal Tips	8
Tips for Better Dopping	8
Miscellaneous hints from here and there	8
Museum Quality...	8
Lincoln's Marble Leaks	9
Selecting Materials For Cabochons	9
October Gem & Mineral Shows	10

TO:

**Important Dates:**

**Board Meeting: October 6**  
 7:00 PM at Ball Jr. High School

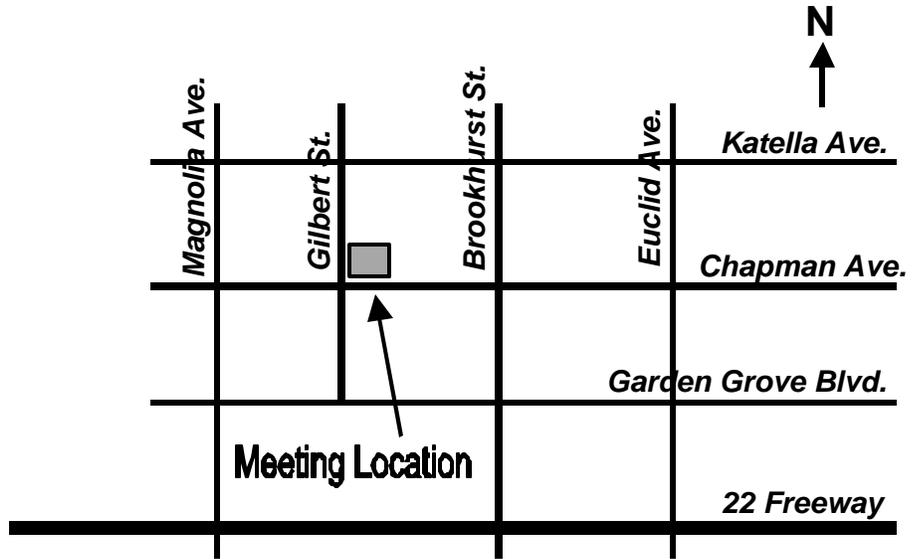
**General Meeting: October 9**  
 Speaker:

— **GENERAL MEETINGS** —

2nd Thursday of the Month  
 7:00 pm - 9:00 PM  
 Garden Grove Civic Women's Club  
 9501 Chapman Ave.  
 (NE corner of Gilbert & Chapman)  
 Garden Grove, CA

**MEETING ACTIVITIES**

Opal Cutting Advice Guest Speakers  
Slide Shows Videos Other Activities



**The American Opal Society**  
<http://opalsociety.org>

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# American Opal Society Membership Renewal

Thank you for continuing to support your American Opal Society!

TYPES OF MEMBERSHIP		DUES / FEES)	AMOUNT PAID
<u>DUES:</u> <u>SELECT ONE</u>	All <u>US</u> Addresses including Alaska and Hawaii	\$25.00	
	<u>International Members</u> = All addresses <u>outside</u> of US Addresses	\$30.00	
<u>ADDITIONAL BADGES</u> = \$5.00 each (First Badge <u>free</u> when joining)		\$5.00	
<u>ONE TIME INITIATION FEE</u> = All <u>New</u> members		\$10.00	
<u>SENIOR DISCOUNT</u> = Age 65 or over deduct \$5.00		-\$5.00	
<b>TOTAL PAID – DUES, less Senior Discount plus Badge plus Initiation Fee (if Applicable)</b>			

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PLEASE PRINT NAME AS YOU WISH IT TO APPEAR ON YOUR BADGE using up to two (2) lines of text for your name, nickname, or name of your opal related business.

**MEMBERSHIP ROSTER & DEALERS LIST:** The AOS publishes a membership directory once per year in its Newsletter, the *Opal Express*. Your name will be included. Please check what additional personal information that you want listed for other members. If it is different from the information above, please note that on the application.

Address     Phone     E-mail     Website

Include my name & address on a list provided to the Dealers selling at our Annual Opal & Gem Show.

If you checked any box above, please sign here: \_\_\_\_\_ Date \_\_\_\_\_

Without your signature here you will not be included in the member info list or included in the dealer roster.

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Email: [webmaster@opalsociety.org](mailto:webmaster@opalsociety.org)  
Article Deadline is the 20<sup>th</sup> of the month prior to each issue

**Are Your Dues Due Now?**

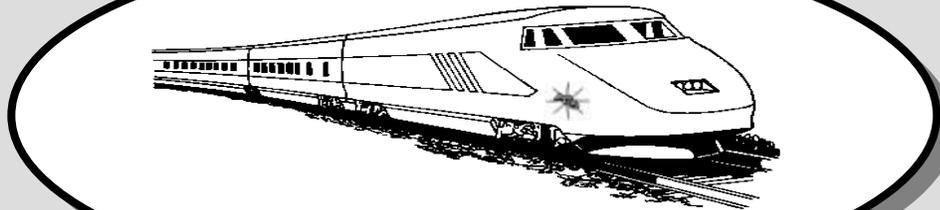
**PLEASE CHECK YOUR ADDRESS LABEL.** If your label shows the current month/year your dues are DUE NOW. If the date is older, your dues are overdue.

**A Renewal Grace Period** of two months will be provided. If your dues are due now you will receive two additional issues of the newsletter. Please note, however, that as the system is now set up, if your renewal is not received you will be AUTOMATICALLY dropped from membership thereafter. It is your responsibility to assure your dues are current.

Thank you,  
The Editor

# The Opal Express

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Society



October 2003

Volume 36 Issue 10

## President's Message

By Pete Goetz

Hi Folks,

**ITS SHOW TIME...** Our 36<sup>th</sup> annual **Opal and Gem Show** will be here soon. November 8<sup>th</sup> and 9<sup>th</sup> to be exact. Looking forward to a great show. We still could use some volunteers.

On Friday, November 7<sup>th</sup>, from about 5:00 pm to 8:00 pm we need some people to help setup the show rooms. That is; setting up tables, laying out electrical cable, putting skirts on tables, setting up seminar rooms, and few other things.

On Saturday and Sunday, we could use help at the reception desk, vendor lunch run, new member desk, putting up and taking down signs (early Saturday morning and late afternoon on Sunday), and assistance in general with ensuring the show runs smooth.

We would like to see all the members living in the Southern California area come down and visit the show. If you can stay for a while and help out, GREAT. If you can't, that is OK also, come on down and have a good time talking and seeing Opal, Meet some of your fellow society members, share what you know, or learn something new. I always do. See you at the Show.

## October Snippets

by Barb Whyre

"Selas Lophus", a stone cottage on the Lightning Ridge opalfields, is named for a fossil. The piece of a jawbone with six ugly-looking sharp teeth, all converted to good blue-black opal, was introduced to museum authorities in the 1960s. According to Dr.Fenner in his Bunyips and Billabongs, few reptiles of that time have been recorded. However, a small species of crocodile with similar forward teeth was still found to be living in Northern Australia's inland waters.

Therefore, the name *Crocodylus Selas-lopheosis* of this specimen has been derived directly from the locality of the long

departed owner of the jawbone. *Selas* is Greek for lightning and *lophus* for a ridge giving us the Crocodile of Lightning Ridge.

## Announcement:

Recently several AOS members e-mailed the Board of Directors members identifying a website announcement by iOPAL of a lottery with opal prizes. The iOPAL website stated that the lottery was supported by the American Opal Society. The BOD determined that the iOPAL website promotion was never approved. A disclaimer was immediately issued to iOPAL, AOS dealers and to many AOS members with e-mail addresses. For further information please read the AOS website notice. For any additional questions please direct them to The AOS Board of Directors from the e-mail addresses or telephone numbers in the Opal Express.

Pete Goetz / Mike Kowalsky, 10-01-2003

## Announcement - American Opal Society 36<sup>th</sup> Annual Opal and Gem Show

It is requested that any members that can physically attend the 36<sup>th</sup> Annual Show come to the show in Anaheim. We have new members that haven't been to a show. This is the major annual event of The American Opal Society. You will meet many dealers that have supported our annual show and their exotic and exciting wares plus see some display cases of opal from the Americas. You should attempt to see some of the seminar presentations, which will expand your knowledge base on opals.

The Board of Directors would also like you to plan to contribute some time as there are many tasks required to put on this annual show. Even a few hours at the reception desk would provide welcome support for the active local members who have been carrying this event these many years. We are certain the experience will be richly rewarding to you.

Sincerely, Pete Goetz President

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# Precious Opal In Volcanic Sequences

(BC Mineral Deposit Profile #Q11)



by S. Paradis<sup>1</sup>, G.J. Simandl<sup>2</sup> and A. Sabina<sup>3</sup>

<sup>1</sup> Geological Survey of Canada, Pacific Geoscience Centre, Sidney, B.C., Canada

<sup>2</sup> British Columbia Geological Survey, Victoria, B.C., Canada

<sup>3</sup> Geological Survey of Canada, Ottawa, Ontario, Canada

Paradis, S., Simandl, G.J. and Sabina, A. (1999): *Opal Deposits in Volcanic Sequences; in Selected British Columbia Mineral Deposit Profiles, Volume 3, Industrial Minerals*, G.J. Simandl, Z.D. Hora and D.V. Lefebure, Editors, *British Columbia Ministry of Energy and Mines*.

## IDENTIFICATION

SYNONYMS: Hydrothermal or "volcanic opal".

COMMODITIES (BYPRODUCTS): Precious opal (common opal, chalcedony, jasper, agate).

EXAMPLES (British Columbia - Canada/International): Klinker ([082LSW125](#)), Northern Lights ([093E 120](#)), Whitesail Range (maps 93E10W and 93E11E) and a precious opal occurrence near Falkland, Eagle Creek ([093K 095](#)); pale green and apple green common opal occurs at Savona Mountain ([092INE158](#)); *Queretaro Mines (Mexico)*, *Virgin Valley (Nevada, USA)*, *Tepe Blue Fire Opal Mine (Idaho, USA)*.

## GEOLOGICAL CHARACTERISTICS

CAPSULE DESCRIPTION: Opal occurs commonly in seams of volcanic ash or lahars sandwiched between successive lava flows. It occurs mainly as open space fillings and impregnations. Common opal, opalized wood and to some extent "fire opal" are widespread within Triassic or younger volcanic sequences, but precious opal is rare. Where opal occurs in massive volcanic rocks, it occurs also as open space fillings, however the opal-

Opal & Gem Show Seminar Schedule		
<b>Saturday; November 8th</b>		
12:00 noon	Walt Johnson	Inherent Hazards in Setting of Opal
1:30 pm	Stan McCall	Inlay Jewelry Design Techniques
3:00 pm	Mike Kowalsky	Created Opal Identification
<b>Sunday; November 9th</b>		
10:30 am	Tim Thomas	Opal Buying Factors
12:00 noon	Barbara McCondra	Up Close and personal With Yowah Opal
1:30 pm	Larry Hoskinson & Leslie Neff	Australia Opal Mining Update

bearing areas are much smaller. Regardless of volcanic hostrock, the precious opal occurrences are discrete, whereas common opal occurs over large areas.

TECTONIC SETTINGS: Volcanic arcs, rifts, collapsed calderas, hot spot related volcanism and others.

DEPOSITIONAL ENVIRONMENT / GEOLOGICAL SETTING: Volcanic sequences formed in subaerial or shallow marine environments where porous, pyroclastic or lacustrine rocks are interbedded with lava flows.

AGE OF MINERALIZATION: Tertiary or younger, commonly Miocene.

HOST/ASSOCIATED ROCKS: Common host rocks are rhyolite, basalt, andesite and trachyte lavas, lahars and other volcanoclastic rocks. Associated rocks are perlite, bentonite, scoria, volcanic ash and diatomite; volcanic rocks may be intercalated with lacustrine sedimentary rocks.

DEPOSIT FORM: Favourable opal-bearing horizons are commonly stratabound. Occurrences of precious opal within these horizons are commonly considered as erratic, controlled by permeability at the time of opal deposition. Individual precious opal-bearing fractures or lenses may grade into common opal and agate over distances of centimetres.

TEXTURE/STRUCTURE: Opal occurs as open space fillings in irregular cavities, narrow discontinuous seams, partially-filled pillow tubes, fractures, vesicles, matrix in volcanoclastic rocks and replacing wood fragments and logs. Common opal may form miniature stalagmites and stalactites within cavities, nodules in clay or diatomite beds and "thunder eggs".

ORE MINERALOGY [Principal and subordinate]: Precious opal; "fire opal", *chalcedony*, *agate*, *common opal*.

GANGUE MINERALOGY [Principal and subordinate]: Common opal, agate, fragments of host rock, clays, zeolites, quartz, *jasper*, *celadonite*, *manganese and iron oxides*.

ALTERATION MINERALOGY: Opal-bearing cavities may have zeolite and celadonite coatings, but so do the barren cavities. There is no known alteration, which is specific to precious opal.

WEATHERING: In arid environments, opal in surface outcrops may desiccate, become brittle and crack. Such material is not suitable as a gemstone. However, these opal bodies may be gem-quality at depth.

ORE CONTROLS: Open spaces and other permeable zones open to the silica-bearing solutions.

**IT'S HERE!!!**

*The American Opal Society's  
36th Annual*

## ANNUAL OPAL & GEM SHOW

*Largest Opal show in USA!*

**Sat. & Sun., November 8 & 9, 2003**

Saturday 10AM - 6PM  
Sunday 10AM - 5PM

Location: **Clarion Hotel Anaheim Resort**

616 Convention Way **ANAHEIM**, California  
Close to **DISNEYLAND**

One block South of Katella Ave.  
On Harbor Blvd.

**GENETIC MODELS:** In many large opal districts, it is believed that during the longer periods of volcanic inactivity, shallow lakes developed. Forests grew along the lakeshores and driftwood accumulated in the lakes. Volcanic eruptions covered everything with pyroclastic materials capped by lava flows resulting in aquifers, perched water tables, and anomalies in the thermal gradient. This in conjunction with subsequent brittle tectonic deformation resulted in ideal conditions for the formation of hydrothermal systems. A variety of silica forms, including silica sinter, opaline silica, chalcedony and common opal are believed to have formed by deposition of silica-bearing fluids. The dissolved SiO<sub>2</sub> content in water is well known to be temperature dependent with the maximum dissolution at around 325°C, however, the conditions needed for the precipitation of precious opal in volcanic environment are not well understood. At least a portion of the opal-CT in volcanic rocks is believed to precipitate directly from supersaturated solutions. The temperatures of formation for precious opal are expected to be relatively low by analogy to sedimentary-hosted precious opal deposits, but temperatures as high as 160°C are reported from fluid inclusion studies. No precious opal is reported from active hydrothermal fields, such as Geyser Valley, Yellowstone or Whakarewarewa (New Zealand). This suggests that the precious opal forms only under very specific physico-chemical conditions. Eh and definitely pH may be important. Chemical composition of hydrothermal fluids in terms of silica concentrations, as well as Na, K, Cl, Ca, SO<sub>4</sub>, HCO<sub>3</sub>, B, Li and other elements may be important. The composition of the silica-bearing fluid is probably modified during migration through the permeable host rock, specially if the latter contains zeolites and/or clays. Zeolites act as molecular sieves and are well known for their cation exchange properties.

**ASSOCIATED DEPOSIT TYPES:** Associated deposits can be beds of diatomaceous earth (F06), volcanic ash (E06), zeolite deposits (D01, D02), perlite and a variety of semi-precious or ornamental silica gemstones, such as jasper (Q05), moss agate (Q03), and chalcedony. Other deposit types occurring in the same setting are hot-spring Au-Ag (H03), hot-spring Hg (H02), agate (Q03) and hydrothermal Au-Ag-Cu: high sulphidation (H04). It is possible that these deposit types are the source of primary amorphous silica.

**COMMENTS:** Precious opal is characterized by a play of color. The term common opal, as used here, covers any opal that does not show this play of colors. Some common opal specimens may be used as gemstones, but in general they have substantially lower value than precious opal. The term "Fire Opal" describes a common opal having a transparent orange to red-orange base color. Such opal is commonly faceted. Precious and common opal coexist within the same deposits.

Common opal and opaline silica are also commonly associated with the spectacular hydrothermal systems characterized by hot springs pools and geysers, mud pots, geyser terraces and



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fumaroles where it may be deposited as common opal, opaline silica or silica sinter. The well known examples of such systems are: Yellowstone hot springs; Geyser Valley in Kamchatka and now inactive Waimangu Geyser (Taupo volcanic zone, New Zealand). It is possible that some of the precious opal is formed by the dissolution of the previously formed common opal, silica sinter in the same conditions as sedimentary rock-hosted precious opal deposits.

#### **EXPLORATION GUIDES**

**GEOCHEMICAL SIGNATURE:** Mn oxide fracture coating was observed in the proximity of the Klinker deposit. In some cases the indicator elements used in exploration for epithermal metalliferous deposits such as Hg, Sb and As may be indirectly applied to precious opal exploration.

**GEOPHYSICAL SIGNATURE:** N/A, except for detecting perched water tables and faults (mainly VLF and resistivity). Thermometry may have use where precious opal is associated with recent hydrothermal activity.

**OTHER EXPLORATION GUIDES:** Boulder tracing is commonly used in opal exploration. Unmetamorphosed or weakly metamorphosed (zeolite facies) terrains (gem opal deteriorates and becomes brittle if subject to moderate temperatures); Tertiary or younger volcanic rocks. Areas containing known occurrences of precious or common opal, opalized wood and possibly chalcedony. Opal occurrences hosted by volcanoclastic

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rocks are commonly confined to the same lithologic unit over a large area. The presence of warm springs in an appropriate setting may also be considered as an indirect exploration indicator.

At the [Klinker](#) deposit, mineralogical zoning within vesicule fillings may be used to delimit the most favorable areas. For example the common opal occurs only within broad areas of agate mineralization and precious opal only in small areas within the common opal mineralization.

## ECONOMIC FACTORS

**TYPICAL GRADE AND TONNAGE:** Grade and tonnage for volcanic-hosted opal deposits are not well documented, largely because the opal extraction is done by individuals or family type businesses. The precious opal distribution within most deposits is erratic, "Bonanza-type". The deposits at Querétaro were discovered in 1835 and are still in production. Furthermore, the term "grade" as commonly used for metalliferous deposits is much harder to apply to gemstone deposits and especially to opal deposits. For example "fire opal" ranges in value from \$CDN 5 to 300 per gram. Average commercial precious opal will sell probably around \$CDN 40 per gram, the top quality stones may sell for \$CDN 1400.00 per gram.

**ECONOMIC LIMITATIONS:** Some of the common opal specimens may be used as semi-precious or ornamental stones, but in general they have substantially lower value than precious opal. Gem opal contains up to 10% water, which contributes to the translucency of the specimens. Precious opal from some localities, such as Virgin Valley in Nevada, are generally not suitable for gems because they crack too easily; however the opal from many other volcanic-hosted occurrences is as stable as that from the Australian sedimentary-hosted deposits. Deposits located in intensely weathered terrains are easier to mine than deposits in unaltered rocks. Prices of the best quality opal have risen steadily since 1991. There is a relatively good market for precious opal, nevertheless strong marketing and value-added processing are considered essential parts of successful opal mining operations.

**END USES:** Precious opal is highly priced gemstone; "fire opal" may be faceted, opalized wood is a specialty ornamental stone commonly used for bookends.

**IMPORTANCE:** Volcanic rock-hosted opal deposits are numerous, but most of today's high quality opal production comes from Australian sedimentary-hosted deposits.

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December 9, 1998

<http://www.em.gov.bc.ca/mining/geolsurv/metallcminerals/mineraldeposi/tpfiles/profiles/d01.htm>

*From the Mineral Deposit Profiles of the British Columbia Geological Survey. Reprinted with written permission from the Province of British Columbia's Ministry of Energy and Mines*

## \*\*\*\*\* "Members Only" Area on Website

The AOS website has been re-hosted with a new web host company, <http://readyhosting.com>. The new web hoster provides capabilities that the old one didn't have. We now have a true password protected area. Two links are there: The Opal Express Archives and Opal Collecting Sites. The archives go back from the present to 1994 and in PDF and HTML format. An account name and password are required to get into the protected area. This password will change periodically and will be in the current issue of the Opal Express. The link is: [http://opalsociety.org/aos\\_members\\_only\\_area.htm](http://opalsociety.org/aos_members_only_area.htm).

To login into the protected area, click the following when prompted: **Name:** member - **Password:** nopotch

\*\*\*\*\*

## Opal Workshop

The AOS opal workshop is at **Ball Jr. High School** on 1500 W. Ball Road, Anaheim, CA. It will be available for AOS members on Wednesday. Contact **Stan McCall** for details at **(714) 220-9282** if you plan to attend a session.

\*\*\*\*\*

## Fair Market Value:

### Old Misconceptions Still Exist

*By Ralph S. Joseph*

*MAY 30, 1997* - In light of the American Society of Appraisers' proposed reform of Internal Revenue Service policies toward personal property appraisers, it seems appropriate to once again tackle the fair-market-value (FMV) dilemma. FMV is a widely used, often misunderstood term. FMV is a legal concept, and is only applicable when the jurisdiction and assignment dictate that it is.

Even with the rather amazing availability of formal appraisal education, some of the old misconceived notions about FMV persist. I still hear jewelers ask, "Isn't fair market value just half of retail?" I also, and probably even more often, hear jeweler/appraisers challenge the whole concept: "If an estate has to liquidate a Rolex watch quickly for \$1,500, how can its FMV be \$3,000? It's not "fair" to the estate. The estate should only be taxed on the dollars it can actually receive when the property is sold."

This may sound fair and just, but as discussed in more detail

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below, a forced sale is not evidence of fair market value and the appraiser's opinion about what is "fair" is meaningless. Fair market value may not seem fair, but as professional appraisers we are bound to follow the letter and spirit of its definition in the appropriate jurisdiction. The definition might change from one jurisdiction to another (i.e. state vs. federal, state vs. different state), and we have to be careful to follow established guidelines in the jurisdiction where we are operating. Accept that as an important bit of information that bears elaboration at another time. Now back to the main subject.

Because ASA is specifically addressing the undervaluation of property in estate scenarios, which it claims results in approximately \$3 billion in unpaid estate taxes each year, I will restrict my discussion to appraising estates.

Understand, though, that fair market value is fair market value, whether it is being determined for estate tax or charitable contribution. I mention both only because the motivations of the client are different in each scenario. In the estate situation, the lower the appraised value, the lower the taxes. With a charitable contribution, the higher the appraised value, the greater the tax deduction and the lower the tax bite. Still, the federal government defines fair market value in essentially the same way for both.

Understand at the outset that this is an overview of the subject. One column about fair market value is by no means a complete treatise on the subject. Still, I hope it will serve as a solid introduction and become a launching pad for your further research. Before continuing, we should look at the IRS definition of FMV as it applies to estate valuation:

The fair market value is the price at which the property would change hands between a willing buyer and willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of the relevant facts. The fair market value of a particular item of property includible in the decedent's gross estate is not to be determined by a forced sale price. Nor is the fair market value of an item of property to be determined by the sale price of the item in a market other than that in which the item is most commonly sold to the public, taking into account location of the item wherever appropriate. Thus, in the case of an item of property includible in the decedent's gross estate, which is generally obtained by the public in the retail market, the fair market value of such an item of property is the price at which the item or comparable item would be sold at retail. Most of us have heard the "willing buyer and willing seller" phrase, along with other snippets of this extended definition. But putting it all together, and taking into account further interpretations of the definition, we get a more complete picture.

Some other terms and phrases that are worthy of scrutiny:

- Neither being under any compulsion to buy or sell: This means simply that neither the buyer nor the seller is under pressure to act. An insurance policy holder

who has sustained a loss is compelled to buy, to replace the item. So the price paid by an insured in this scenario is not evidence of fair market value.

- Forced sale: By the same token, if a sale is forced by either legal action or a need for immediate cash, it also would not be evidence of fair market value.

- The seller is compelled to act: Both having reasonable knowledge of the relevant facts: If one party or the other is unaware of a material fact or facts that might influence his or her decision to participate in the transaction, the sale is tainted in terms of its fair-market-value applicability. The price paid for a fake Rembrandt by someone who believed it to be authentic would not be evidence of the fair market value of fake Rembrandt paintings!

- Most commonly sold to the public: The market level at which the item most commonly changes hands between willing buyers and willing sellers, along with the additional criteria in the definition also being met, is a critical factor in fair-market-value research. You might do very accurate research and come up with a mound of evidence in the form of transaction prices. But if you research the wrong market level, your data is meaningless with regard to fair market value.

One example the IRS uses refers to a used automobile. To paraphrase: The FMV of the used car is not what the dealer would pay the consumer when buying the car. Rather, it is the price at which the public, the ultimate consumer of the vehicle, pays for it when purchasing it from the dealer. So if you research a particular automobile by examining prices paid by dealers who intend to resell the vehicles, your work would be wasted. Pay close attention to the market level you choose, item-by-item, in estate and charitable contribution appraisals. Comparable item: An item not necessarily identical to the one being researched, but capable of being compared to it. We generally have to interpolate from the subject item to comparables, in order to accurately make that comparison. So who is this "ultimate consumer" we sometimes hear about? The IRS has made it very clear and court decisions have upheld that items being appraised for their FMV must be looked at in their current form, where they are purchased by the final consumer of the item in that form (therefore, not for resale "as-is"), then placed at the proper market level, where the item "is most commonly sold to the public."

**Think of Final Purchaser**

The "public" for a particular item must be looked at carefully. In each case, think in terms of whom the final purchaser is of the item in its current form. The ultimate consumer of a damaged wristwatch that is not repairable is different than the consumer of the same watch in perfect running condition. The "ultimate consumer" of the damaged watch might be a watchmaker who would purchase it for parts, or if it is gold, a jeweler purchasing it as scrap. But for the perfectly running version, the "willing buyer" is most likely a retail customer, purchasing from a jeweler or watch store that regularly sells such watches. Fair-market-value consideration must take into account the item as-is.

What if your FMV item is a parcel of loose, faceted, low-grade amethysts who is the ultimate consumer of these gems? Certainly a private consumer would not be a frequent purchaser of such a parcel. But a manufacturer that creates low-grade, promotional or commercial jewelry would be. So the price paid by this manufacturer for this parcel would be its FMV.

But what about one single, high-grade, faceted amethyst now, who is the ultimate consumer? Still not the private consumer, who generally does not buy a loose gem as-is. The private consumer would be more likely to purchase the amethyst

set into a piece of jewelry. So who purchases the loose amethyst? The retail jeweler. The FMV of the single amethyst most likely is based on what a retail jeweler would pay for it when buying from the wholesaler (willing seller).

As a mental exercise, choose other items and plug them into what you think is the proper market level. You will find that the process gets easier and things get clearer. Says Gregory E. Sherman, ISA, GG, NGJA, vice president of marketing for European Gemological Laboratories, New York: "It's one thing to study valuation science in the classroom environment, but the point is really driven home in the real world. A recent assignment regarding the fair market value of a variety of opal jewelry from the mid-1800s to modern times really illustrated the difference. The contrast became clear between what replacement values would have been for some exceptional-quality opal and what fair market value was for these same pieces, based upon what each item would sell for in its present state, in the "most common market," and according to the proper fair-market-value definition."

And that about says it all. As always, I welcome your comments, care of National Jeweler.

*From the National-Jeweler.com. Reprinted for educational purposes under the "fair use" provision of the U.S. Copyright Act.*

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### First Base

In 1905 William Griffiths was first baseman for a team called the Rhyolites at Salt Lake City. A batter for their opponents hit a ground ball toward first base that struck a small stone and bounced into Griffith's glove for an easy out.

He picked up the little stone and started to throw it off the field when something caught his eye. Checking it carefully, he saw free gold in it. He put it in his pocket and continued with the game.

That evening he returned to the ball field with a lantern and picked up a bucket full of rocks. The next day he knew his rocks assayed more than \$900 a ton. (In those days gold was \$20.67 an ounce!) With two friends he quietly bought the ball field.

Sinking the initial shaft of the First Base Mine encountered pay dirt at 33 feet. Griffiths became a very wealthy man!

*Lapidarian Editor Sallee Brumbaugh's note: (The above article was given to me by club member Brinton Brown. It is based on one of the more than 250 anecdotes in "low and Inside", a book by Ira L. Smith and H Allen Smith (not related) published in 1949. Starting in the early 1920s, Ira Smith who lived in Alexandria, VA spent many hours in the Library of Congress mining old newspapers for baseball lore. Brinton thought since it is baseball season, club members might enjoy this story.)*

*From The Lapidarian, 7/02.*

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### Opal Tips

Is opal fragile? A properly cut and polished opal, when properly set, lasts a lifetime. A properly cut opal has a flat back that can be evenly supported by a matching flat setting.

Thicker is better: The layer of color must be thick enough to cut DOWN INTO it slightly to achieve the best results.

Always cut for quality: Think of this whenever a stone has a problem. Example: it may be possible to cut one big stone with a little patch, or cut out the patch and cut two smaller stones. Generally, it is better to cut the smaller stones.

Why is opal stored in water? As a buyer, ALWAYS ask to see the opal parcel dry. Opal is stored in water because its appearance wet most closely resembles what it will look like polished. Be aware that water, and even more so glycerin, hides cracks.

Crystal opal is more brittle. Therefore, it flakes more easily. It needs a 320 lap for working it. Be sure to break in all diamond wheels with agate to knock off uneven edges of the diamonds.

*From The Opal Express 4/1999*

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### Tips for Better Dopping

Does your stone come off the dop when you are working it? How many stones have you done with that particular piece of wax? Perhaps it's like most of us - old and wore out!

- Seriously, the useful life of most dopping wax is about three to four stones. The wax contains large amounts of shellac etc. which gradually burns out. You should NEVER put the wax in the flame - the hottest part of the flame is just beyond the tip, so there is no point in putting the wax in the flame. .
- Was your stone clean when you dopped it? Foreign material will prevent the wax from adhering to your stone properly.
- Was your stone hot enough? It should be just able to be held in the hand, but not hot enough to make you drop it.
- When you dopped the stone was there a good thick pad of wax between the stone and the stick? No wonder it came off - the stick should be as close to the stone as possible, or the cold water will make the wax contract and bingo! Off it comes.
- Never have the wax wider than the stone - you are working the stone, not the wax
- When gluing a gem stone to a brooch bar, glue bar above the center that way the stone will lie flat when worn.
- To get that extra special shine on quartz crystal, also agate, add a little Oxalic acid to your polish.
- If you are having trouble polishing your tiger-eye (providing it has been sanded properly), try polishing with cerium oxide on a felt buff.
- When working with tiger-eye, always work with the grain and not against it.
- If you have a large slice of obsidian try using a glasscutter to trim to size. (It does work!).
- One for the tumbler using plastic barrels and they persist in leaking around the screw cap. Try putting a couple of elastic bands around the thread, then screw the lid on.
- After all the work your home outfits have done in the past, it is a good idea to check the bearings for wear in your grinding outfit and saw. A worn bearing in the grinder can put your wheel out of round in next to no time. Also, a worn bearing in the saw can set up a chatter which puts some saw marks on the material you are cutting.

*From Mt Gravatt Lapidary Society Inc.*

<http://ozbird.com/lapidaryarchives.htm>

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### Miscellaneous hints from here and there

- Try storing your 6" sanding and polishing discs? Use an inexpensive music CD case. They fit in the pockets perfectly, and you can label each pocket with a different grit number.
- Want to keep your sterling silver jewelry from tarnishing. Tarnish is caused by sulfur gases in the air. Chalk is a natural absorber of sulfur. So place sticks of chalk (blackboard chalk) in your cases, jewelry boxes, jewelry drawer, or just around your jewelry.

*From The Tektite. 4/02*

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### Museum Quality... and other misused terms

*By Roger K. Pabian*

I have made some very interesting observations surfing the various on-line auction services such as those offered by eBay® and YAHOO® and have seen hundreds of inaccurate to fraudulent descriptions of merchandise offered by various sellers. A descriptive phrase I encounter often is "Museum Quality". No real description or definition of "Museum Quality" really is available in the literature or in the trade. In the jewelry trade, the term "Flawless" often appears in the description of a stone being offered for sale. This works because there is a definition for "Flawless" that has been established by the Federal Trade Commission (FTC). A stone can be offered as flawless if no imperfections can be observed on its surface or in its interior at ten-power magnification (10X). If you have a diamond and a small pyrope crystal can be detected inside it at 11X, the stone is legally flawless.

Unfortunately, there is no such easily workable definition for "Museum Quality". Perhaps to get an understanding of "Museum Quality", we should look at the role of the museum. To most people, the museum is a place where one can view educational exhibits in a broad array of sciences including geology, mineralogy, paleontology, botany, zoology, ecology, astronomy, anthropology, and many others. The role of the museum that the general public usually does not see is that of a warehouse for research specimens and collections. The above sciences are largely descriptive and subjective. The researcher collects, prepares, describes, analyzes and interprets the data provided by the specimens in the collections. All of the specimens that are used by the researcher are placed in systematic collections (or often stratigraphic collections in geology and paleontology). The specimens are of sufficient value to justify the cost and space of storing. They are Museum Quality. The specimens may be parts of broken valves of brachiopods of a very common, nondescript species but they are Museum Quality in every sense of the world.

On the other hand, someone may have a slab of very well preserved crinoids that show exquisite detail and has every bit of splash and pizzazz that makes it a very attractive item for general viewing. Is it Museum Quality? Yes, it is, provided the museum saw fit to allow it space to fill a display. Suppose the same specimen had no geologic or geographic data with it, how does its Museum Quality rate with the brachiopod collection above? Really, it rates quite a bit lower. Its display quality may be very high but its research and teaching potential are pretty low.

We would do much better to use the term "Display Quality" for many specimens. Many very attractive specimens that are highly prized by their owners would likely find no spot in a museum. That is because the accompanying data is absent.

"Collector Grade" is another nebulous term but it is probably desirable to Museum Grade or Museum Quality. This term does not imply that a specimen would necessarily find a place in a museum but it would likely find a place in some private collector's cabinet. I can live with that term but I keep in mind that it has no real definition.

"Old Estate" or "Vintage" are terms that often appear in the rock descriptions in magazine advertisements or on-line advertisements or auction services. What does "Old Estate" really mean? - That older is better? We often hear agates being described as old material. To my knowledge, all Lake Superior agates are about 1,200 million years old and all Laguna agates are 23 to 40 million years old. Each of these examples are made up of materials that are the same age. The implication is that material that was collected 50 years ago is better than that collected today. There were an awful lot of junky Laguna agates that were mined in 1950 along with the good ones. They all went into the same hopper. Some of the finest Laguna agates are

currently being mined. The prices are higher at the mines and at shows, but much of this is a product of inflation rather than demand or rarity.

What does "Vintage" mean? When applied to wines, it can have a great deal of meaning. It seems that a certain grape from a certain area can provide a very fine wine in a given year. The wine gains a reputation among connoisseurs and the "Vintage" becomes desirable. It may be that in the same year as the vintage wine above, another vineyard a hundred miles down the road produced several unit trains of Sneaky Pete Muscatel. Its poor quality implies a lower price and it may find a ready audience only in the skid rows of large cities. Even if it was bottled in the same year as the vintage wine above, the Sneaky Pete isn't a vintage wine.

Most of these terms are used by sources that have little knowledge, appreciation or understanding of the material they offer for sale. It is still the buyer's responsibility to apply the caveat emptor (buyer beware) thinking when obtaining rock, mineral and gem specimens. The sellers are usually legally liable for misrepresented materials that they offer. The buyer, however, may not find it worthwhile to go to court for \$42.50. That lets many unethical or ill-informed dealers off the hook. The buyer can obtain a great deal of self-protection by perusing the published literature. Knowledge is one's best defense, but in the meantime, keep in mind that terms like "Museum Quality", "Vintage" and "old Estate" have little if any meaning.

*From the Pick & Shovel 9/2001, Via Strata Gem, 5/2003*

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### **Did You Know?**

#### **Lincoln's Marble Leaks**

Did you know that the Lincoln Memorial in Washington, D.C., is sprouting stalactites and stalagmites in its basement? This phenomenon is caused by water seeping through the marble. Though the Memorial is a little over 55 years old, the formations have grown several feet in length. When the Memorial was built, engineers sank 122 cylinders to bedrock 50 feet underground. The base of the Memorial is set high above ground on a rectangular platform, thus forming a cavernous space beneath the floor. This is where the stalactites and stalagmites are growing.

From Yakima G&M News via the Rockwood Rockhound News 9-1999

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### **Selecting Materials For Cabochons**

*By John Sinkankas*

A beginner is often confused by the great variety of cabochon material offered for sale. Selection should be based on quality. Carefully inspect the material of your choice. It must be solid, free of any cracks or holes, and be uniform in texture. Certain kinds of jasper contain soft spots because all the pores did not fill up with the silica bearing solutions.

Check slabs of this kind by wetting the surface and watching to see if water remains on top or is soaked up. The material with soft spots will not polish. Many slabs are displayed at dealers' tables in flat pans of water. Porous spots will soak up the water so it is best to allow the selected slab to dry thoroughly. To check it for uniformity in texture, hold it up to a strong light at an angle.

When the beginner chooses a Material for his/her first attempt at gem cutting, agate, such as Montana, Mexican or Brazilian, is a good choice. These agates are hard and tough enough to allow for mistakes that will be made and corrected. It is wise to Make the first cabochon about one half inch in size and gradually work on larger cabs as one gains experience.

*From the Pegmatite, 2/03; Via The Rock Collector - 4/03*

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### October Gem & Mineral Shows

**3-5--HILLSBORO, OR:** 23rd annual show; Portland Regional Gem & Mineral Club; WA County Fair Grounds; admission \$7 for 3 days; Fri. 10-7, Sat. 10-7, Sun. 10-5; contact Dick Parks, (360) 892-3716.

**10--SIERRA VISTA, AZ:** 29th annual show; Huachuca Mineral & Gem Club; Cochise College, 901 N. Colombo; Fri. 12-5, Sat. 9-6, Sun. 9-4; free admission; contact Mike Anderson, P.O. Box 1596, Sierra Vista, AZ 85635, (520) 456-9202; e-mail: [mikea@theblueopal.com](mailto:mikea@theblueopal.com).

**10-11--BIG SUR, CA** 12th annual jade festival; South Coast Community Land Trust, Pacific Valley School PTO; Fri. 12-6, Sat. 10-5, Sun. 10-5; free admission; jade, gems, wood, stone, raffle; contact Kirk, (831) 394-8315 or (831) 667-2276.

**10-12--COSTA MESA, CA:** Show, "West Coast Gem & Mineral Show"; Martin Zinn Expositions; Holiday Inn-Bristol Plaza, 3131 S. Bristol; Fri. 10-7, Sat. 10-7, Sun. 10-5; free admission; 85 foreign and domestic dealers; contact Martin Zinn Expositions, P.O. Box 999, Evergreen, CO 80437-0999, (303) 674-2713; e-mail: [MZ0955@aol.com](mailto:MZ0955@aol.com); Web site: [www.mzexpos.com](http://www.mzexpos.com).

**11-12--ANTIOCH, CA:** 45th annual show, "Treasures of the Earth-2003"; Antioch Lapidary Club; Contra Costa County Fairgrounds, Flower Bldg., 10th and L streets; Sat. 10-5, Sun. 10-5; exhibits, dealers, demonstrators, hourly door prizes, local petrified wood, gems and minerals, fossils and crystals, lots of rocks and slabs, beads and jewelry, repairs, supplies, books, tools, equipment; contact Dave Zabaldano, (925) 516-0651, e-mail: [dfz@cctrap.com](mailto:dfz@cctrap.com).

**11-12--PAYSON, AZ:** Show; Payson Rimstones Rock Club; Tonto Apache Reservation Rec. Center, Hwy. 87 by Mazatzal Casino; Sat. 9-5; Sun. 9-4; adults \$3, children under 12 free; discount coupons available at Payson Chamber of Commerce; hand-crafted jewelry, gems, minerals, lapidary arts, supplies; dig quartz crystals at the Diamond Point Recreational Rockhound fenced dig area Oct. 1-Mar. 1; contact Bruce Berman, (928) 468-9532; e-mail: [bnbberman@cybertrails.com](mailto:bnbberman@cybertrails.com).

**11-12--TRONA, CA:** 62nd annual show, "Gem-O-Rama 2003"; Searles Lake Gem & Mineral Society; Trona Lapidary and Show Bldg.; Sat. 8-5,

Sun. 8-4; 21 gem and mineral dealers, displays, demonstrations, geode cutting and sales, three mineral collecting trips, IMC Chemical Co. tours, prizes, movies; contact Bonnie Fairchild, 84830 12th St., Trona, CA 93562, (760) 372-5356; e-mail: [fairchil@iwvisp.com](mailto:fairchil@iwvisp.com); Web site: [www1.iwvisp.com/tronagemclub/](http://www1.iwvisp.com/tronagemclub/).

**11-12--TUKWILA, WA:** 27th annual show; Northwest Opal Association; Tukwila Community Center, 12424 42nd Ave. S; Sat. 10-6, Sun. 10-4; adults \$3, children under 12 free with adult; opals, gems, jewelry, exhibits, demonstrations, door prizes, raffles; contact Gerry Alexander, (360) 876-4543.

**17-19--FRANKLIN, NC:** 14th annual show, "Leaf Lookers Gemboree"; Franklin Area Chamber of Commerce, Gem & Mineral Society of Franklin; Community Facilities Bldg., Hwy. 23/441S; Fri. 10-6, Sat. 10-6, Sun. 12-5; adults \$2, children under 12 free; sales, special exhibits, equipment, supplies, demonstrations, jewelry, jewelry repairs, custom mounting and cutting; contact Franklin Area Chamber of Commerce, 425 Porter St., Franklin, NC 28734, (888) 510-GEMS; Web site: [www.franklin-chamber.com](http://www.franklin-chamber.com).

**18--CANOGA PARK, CA:** Annual show; Woodland Hills Rock Chippers; Canoga Park Community Center, 7248 Owensmouth Ave.; Sat. 10-4; free admission; contact David Dills, 17441 Covello St., Van Nuys, CA 91406, (818) 774-0900; e-mail: [WHRockShow@aol.com](mailto:WHRockShow@aol.com).

**18-19--ANDERSON (REDDING), CA:** 50th annual show; Shasta Gem & Mineral Society; Shasta District Fairgrounds, off Hwy. 273; Sat. 10-5, Sun. 10-5; free admission; dealers selling gems, jewelry, minerals, fossils, gold, silver, gifts, tools and supplies, silent auction, hourly door prizes, demonstrations, exhibits, grab bags, and more; contact Shasta Gem & Mineral Society, (530) 221-6542, (530) 244-2240, (530) 474-4400.

**18-19--CAYUCOS, CA:** Show; San Luis Obispo Gem & Mineral Club; Vet's Hall at the Pier; Sat. 10-5, Sun. 10-5; free admission; contact Bob Hurlless, 2290 Greenwood, Morro Bay, CA 93442, (805) 772-7160.

**18-19--EL CAJON, CA:** Show, "Treasure of the Earth"; El Cajon Gem & Mineral Society; El Cajon Valley Masonic Hall, 695 Ballantyne St.; Sat. 10-5, Sun. 10-5; adults \$2.50, children under 12 free; contact Mikki Santens, 1150 Greenfield Dr., El Cajon, CA 92021, (619) 440-3201; e-mail: [pcsantens@aol.com](mailto:pcsantens@aol.com).

**18-19--PLACERVILLE, CA:** 25th annual show; El Dorado County Mineral & Gem Society; El Dorado County Fairgrounds, 150 Placerville Dr.; Sat. 10-5, Sun. 10-5; adults \$2, children free; contact Jackie Cerrato, P.O. Box 150, Placerville, CA 95623, (530) 676-2472; e-mail: [edcgemclub@hotmail.com](mailto:edcgemclub@hotmail.com).

**18-19--SANTA ROSA, CA:** 27th annual show; Santa Rosa Mineral & Gem Society; Santa Rosa Veterans Memorial Bldg., 1351 Maple Ave.; Sat. 10-6, Sun. 10-5; adults \$4, children 12 and under free with adult; 77 tables of retail dealers, mineral and jewelry displays, demonstrations, silent auction, raffle; contact Ken Evans, P.O. Box 997, Kenwood, CA 95452, (707) 838-9538; e-mail: [kevans99@aol.com](mailto:kevans99@aol.com).

**18-19--WHITTIER, CA:** Show, "Geodes: Nature's Treasure Chest"; Whittier Gem & Mineral Society; Whittier Community Center, 7630 WA Ave.; Sat. 10-5, Sun. 10-5; free admission; contact Jay Valle, 1421 Latchford Ave., Hacienda Heights, CA 91745, (626) 934-9764; e-mail: [jvalle@aqmd.gov](mailto:jvalle@aqmd.gov).

**25-26--LAKE HAVASU CITY, AZ:** 33rd annual show, "London Bridge Rock Show"; Lake Havasu City Community Center, 100 Park Ave.; free admission; exhibits, dealers, craft demonstrations; contact Manny Frisch, (928) 855-9324.

**31-2--BLACK CANYON CITY, AZ:** Show, "Rock-A-Rama 2003"; Braggin' Rock Club of Black Canyon City; Albins Center, K-Mine Rd.; Fri. 9-4, Sat. 9-4, Sun. 9-4; free admission; contact Sue Pielage, P.O. Box 308, Black Canyon City, AZ 85324, (623) 374-5821; e-mail: [bccrockclub@yahoo.com](mailto:bccrockclub@yahoo.com).

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