
THE 745th MEETING
of
THE MINERALOGICAL SOCIETY
OF SOUTHERN CALIFORNIA

7:30 p.m., Friday, February 18, 2000
Geology Building E Lecture Hall
Pasadena City College
Pasadena, California

Featuring A Round Table

“Tales of Tucson”
By

All Who Went There

FEBRUARY PROGRAM

As traditional, our February meeting will feature "Tales of Tucson" with reports and observations from members just returned from Arizona. In addition, we will discuss our field trip schedule for the year. Our insurance problems are behind us and we intend to resume an active field trip program. We also hope to have a surprise speaker from the Kongsberg Silver Museum in Norway, but details remain to be worked out.

PRESIDENT'S COLUMN

by Bob Housley

Our Banquet really got the new millennium off to a terrific start. About fifty people attended. Thank you, Cathy Casey. The food was good and the fellowship irreplaceable. The after dinner talk by Bill Larson was truly outstanding. Thank you, Carolyn Seitz. At a relaxing pace we learned a lot about the county of Burma, its people and customs, and its fabulous gem mining district. Much of this was information known to few westerners. During the course of the talk we saw a lot of pictures of wonderful gems and gem crystals. What a happy surprise it was to learn at the end that Bill had brought some to show us first hand. I must mention a large flawless golden topaz and a beautiful cluster of large pink tourmalines, but the real killer was a large prime quality ruby crystal in a sparkling white calcite matrix. I only hope there will be another chance later for the rest of you to see these pieces.

Tick Canyon Update. Since writing my column last month I have had a chance to read some of the extensive literature on this locality. It turns out that Tick Canyon is the type locality and the only accessible locality for the rare strontium borate mineral veatchite. It also turns out that some pearly white blades coating cracks in shale that I had brought back to identify are this rare mineral. After learning that I went down to the L. A. County Museum to look at their veatchite. They have six samples, all from Tick Canyon of course, and only

one is slightly nicer than what I found. The surprising moral is that it is still possible after all this time to find good samples of a rare mineral right in our own back yards.

San Diego County. Since last month Garth and I have found the mine that produced the exotic material he had found in a rock pile along the road. It is about a mile down another totally overgrown road. Although it was a big thrill to find it, it did not help much as far as collecting minerals yet, because it is largely covered by caved material. Now that we know where it is we will have to go back with shovels.

In samples collected at the mine I did identify the primary tungsten mineral. It is ferberite, iron tungstate. George Rossman has confirmed that well crystallized dumortierite such as we have found here is very uncommon. He is using one of the samples to obtain reference optical spectra of that mineral.

Borate. U. S. Borax has now finished their work at Borate and all the old mines are now very thoroughly filled in and the roads into their property effectively blocked with big rocks. The good news is that during the course of this work they made fresh exposures of a least a couple of colemanite veins that are not too far off the Mule Canyon Road. Therefore there should still be good opportunities to collect colemanite and celestine. I expect I will be able to lead an MSSC field trip there in the Spring, but I will need to get it approved by the company.

Web Photo Albums. Recently several commercial sites have started letting people generate photo albums on the web. I have recently joined one called ClubPhoto at www.clubphoto.com and have posted, among other things, some pictures of minerals from the San Diego County and Tick Canyon sites above. To access these albums you will probably need my e-mail address, which is on the back page of the Bulletin. If you have digital images and a way to put them in JPEG format any of you could easily create your own albums. This may turn out to be a good way to exchange information on minerals and mineral collecting. If the demand arises we could start a section for photo album addresses in the Bulletin and put them on our MSSC web site.

I hope you all have a good time in Tucson and look forward to hearing about it at our meeting. We might also have a surprise speaker.

Tony Kampf's Tucson Primer (2000)

What is Tucson anyway?

It's a lot more than just a city in southern Arizona. For a brief period in early February each year, it becomes the focal point of the entire gem and mineral universe.

How did it start?

The first show was staged rather apprehensively by the Tucson Gem & Mineral Society back in 1955 in a grade school auditorium. The show was an immediate success and was moved the next year to a large Quonset hut at the Pima County Fairgrounds. A turning point came in 1961 when Paul Desautels of the Smithsonian accepted an invitation to exhibit. He became the show's greatest advocate, encouraging the foremost dealers and museums to participate. In 1971 a few of the dealers began selling from their motel rooms after show hours, thus spawning the motel show phenomenon. The TGMS Show moved to the Tucson Convention Center in 1972 where it is still held. At about the same time, gems started to come into their own in Tucson and satellite shows for both gems and minerals have proliferated in the ensuing years. This February Tucson will host more than two-dozen gem and mineral shows and attract tens of thousands of gem and mineral lovers.

Who will I find there?

Certainly all the major mineral dealers in the world are there, as well as most of the minor ones. You should expect to find just about every gem dealer who does trade shows set up in a booth somewhere. You won't find

Tiffany or Cartier with jewelry to sell, but you can be sure they'll have their buyers looking around. Of course, gem and mineral enthusiasts from every corner of the world will be swarming.

What will I find there?

You'll find everything imaginable that bears any possible connection to the world of gems, minerals, and fossils; and lots of other stuff too. The mineral dealers, especially, save many of their best new finds, so they can make a big splash at Tucson.

How will I find it?

There are a variety of guides to the shows that can be picked up free around town. Some of the hobby and trade publications put out their own guides that you can study before you get to Tucson. You can look on the World Wide Web as well. Bob's Rock Show, for example, offers a lot of Tucson information and links to websites for many of the shows (www.tucsonshow.com).

How can I get the most out of the experience?

First of all, don't try to see everything; it's an impossible feat and you'll kill yourself trying. On your first visit, try to get a flavor for the whole experience by touching all of the major shows and at least a few of the smaller ones. Along the way, concentrate more of your efforts on the shows that fit your interests best. Be aware that, besides things to buy, there are many social and educational programs staged by various gem and mineral organizations. As years pass, you should try to develop an optimal strategy, but remember it's like shooting at a moving target. I've gone to Tucson every year since 1974, and I still haven't mastered it.

What are the must-sees?

If you are interested only in gems, make sure you get to the American Gem Trade Association (AGTA) Gem & Lapidary Dealers Association (GLDA), and Gem & Jewelry Exchange (GJX) shows. For minerals, the Arizona Mineral and Fossil (AMF) Show and Tucson Gem & Mineral Society (TGMS) Show shouldn't be missed. The TGMS Show is often referred to as the Main Show. Be aware that there are at least a dozen other significant shows. When you need a break, take a ride out to the Arizona-Sonora Desert Museum.

How do I find what's new and hot?

This is perhaps the most asked question and the hardest one to answer. It takes a long time to see all the shows and to do so comprehensively is impossible. Even if you try, you will miss a lot because the most noteworthy and reasonably priced material gets snatched up quickly. Don't be afraid to ask around; and listen carefully to all the rumors that circulate. Not all of them will pan out, but following hot leads is part of the fun. Also, be aware that the best minerals nearly always end up at the TGMS Show. The TGMS Show dealers usually unveil their treasures for the first time when the show opens, creating what has been affectionately called the "feeding frenzy".

How do I get the best deal?

This, probably the second most asked question, is equally difficult to answer. There is no tried-and-true, never-fail approach. Some of the die-hards, mostly dealers, stake out the likely motels in Tucson as early as mid-January, so that they can be the first to jump on any hot new material that shows up. It is not unusual for the finest of the new material to change hands and increase in price several times before finally showing up in dealers' booths at the Main (TGMS) Show. For those without the time or ruthlessness to follow this approach, another possibility is to wait until the last day of a show, when the dealers are usually more desperate for sales, and haggle them to death while waving greenbacks in front of their faces. This can be surprisingly effective, but be aware that you won't generally get the most sought-after pieces this way. Whatever approach you

choose, don't be afraid to dicker, especially on the expensive items.

What's the difference between wholesale and retail?

You'll see many shows billed as "wholesale" and "open only to dealers", but in a sense everything in Tucson is wholesale compared to the prices you'll see in true retail stores. At the TGMS Show there are both retail and wholesale sections. The prices aren't all that different, but the overall quality tends to be higher on the retail side of the curtain. You will often see material for sale "by the flat" in the wholesale section. Packaging by the flat was made popular decades ago by mineral collectors who found beer flats to be convenient containers for specimens collected in the field. Another wholesale term that may throw you is "keystone", which means that the price marked on the specimen is suggested retail and the cost to you is half. "Double keystone" means you pay only one quarter of the marked price.

How do I get into a show?

Most of the shows are free, but many require that you register and show at least a business card and often a resale license. Many of the old hands have found a way around this obstacle by starting their own gem and mineral "business". The Tucson Gem & Mineral Society Show is open to all, but requires a reasonable admission charge.

When should I go?

Pay special attention to the periods that the various shows cover; they don't all start and end on the same day. The first of the shows open in late January. All close on or before February 13. The majors: AGTA (Feb. 2-7), GLDA (Feb. 2-7), AMF (Jan. 30 - Feb. 12), GJX (Feb. 3-8), TGMS (Feb. 10-13). If you only have a few days, try Feb. 7-10 so you can hit the end of the gem shows and the start of the TGMS Show.

Where do I stay?

If you don't already have a reservation, try Phoenix (just kidding). Most of the prime rooms are gone by September and you can expect to pay a premium, regardless. On the low end, a double room at Motel 6 costs about \$50, and they were all booked up before the end of last year's show. If you're desperate, try calling the Metropolitan Tucson Convention & Visitors Bureau at 800-638-8350 or visit arizonaguide.com.

Editor's Note:: We are grateful to Tony for permission to print his primer. Tony is Dr. Anthony Kampf, Curator, Gems and Minerals, Los Angeles County Museum of Natural History and an Honorary Member of MSSC.

Editor's Note: The following concludes the paper by John Sinkankas begun in last month's edition of the Bulletin. We again express our great appreciation to John for permission to print this work which provided the basis of his lecture at our November show.

TECTONIC REOPENING OF MINERALIZING CHANNELS IN GRANITIC PEGMATITES

By John Sinkankas

DOUBLY TERMINATED CRYSTALS

A striking feature of the gem pockets of the Mesa Grande pegmatites, especially those of the Himalaya-San Diego mine group, is the presence of an astonishing quantity of doubly-terminated elbaite crystals. No other tourmaline-producing pegmatite produces so many crystals of this perfection of growth, nor of such consistently high quality. In some pockets that the author

excavated the crystals were so abundant that it seemed as if an empty pocket had been deliberately filled by hand with as many crystals as it could hold and the interstices then packed solidly with clays, flakes of cleavelandite and lepidolite, and other minerals. On the other hand, other unfilled pockets in the Himalaya pegmatites have been found in which the doubly-terminated tourmaline crystals were few in number and no clay was present except a light coating atop the floor debris. Several pockets that were similarly empty of clays or finely-granular minerals have been noted during the recent mining campaign in the Himalaya Mine (Larson, 1984).

The loose elbaite crystals were originally rooted upon schorl stubs which came to the surface of wall lining slabs. Beneath such surfaces, the roots change to entirely black schorl and narrow in diameter towards their nucleation points near the margin of the pegmatite body. In rare instances, elbaite, still attached to schorl, but in matrix of quartz/feldspar, provides highly esteemed specimens, but mostly the crystals have been detached and consequently form much of the pocket filling. The breaking of the crystals at the point of wall attachment is probably due to the abrupt change in chemical composition, hence cell size, from schorl to elbaite. Weaknesses in elbaites along planes and cylindrical zones of different color is well-recognized, perhaps more so by lapidaries who are required to cut such crystals and find to their chagrin that elbaite spontaneously cleaves or fractures along color divisions, especially when outer zones have been cut away and presumably fail to compress inner zones such that they retain their solidity. Especially difficult to successfully facet are Himalaya prisms with green at one end and pink at the other; cracking very commonly occurs at the color junction. Other signs of strain relief are numerous minute fractures parallel to c , often in a thin outer color zone, and, when internal strains are large, the spalling off of pieces of the crystal to leave an almost spherical "nodule," usually of top gem quality and free from strain. In some of the nodular crystals it is sometimes possible to remove the layers with slight pressure from the tip of a knife. The slight force that the lapidary applies to these crystals suggests that very little natural force is required to detach them from their schorl roots and to further segment them into shorter prism pieces.

As has been suggested, the development of very high pressure within pockets may exert sufficient physical force to detach elbaites from the walls but it does not explain how such crystals continue to grow on both ends, sometimes increasing their volume by as much as 25% to 30%, without any sign of attachment to each other or to other pocket minerals. If a pocket ruptures, a rapid release of pressure must take place with escape of much of the solution that produced tourmaline. Because of the amount and the high quality of the tourmaline added to detached crystals, there had to be a long-sustained passage of solution through the system thereafter. Furthermore, if the crystals grew symmetrically on all sides, it was necessary that they be suspended in some medium that allowed growth from all sides but prevented contact with other minerals. It has been suggested that this medium is clay and/or other fine bits of material that occur in pocket floors, although in the case of clay, it would seem that its inherent imperviousness would allow only minimal growth. In the case of less compact aggregates, for example, lepidolite booklets and scales, thin loose blades of cleavelandite, shards of quartz and feldspar, etc., the force of crystallization, like that which thrusts aside the components of schist containing euhedral almandine crystals could also operate for elbaite crystals and thus permit them to doubly-terminate even when suspended in an aggregate of solids. If this did occur, then we should find doubly-terminated elbaite crystals of larger size in those pockets free of debris and smaller crystals in pockets filled with debris. Small and large elbaite crystals do occur in Mesa Grande and Pala pockets, but these represent different generations of growth rather than varying rates of growth of the same generation due to pocket environment. In general, the small, slender prisms which tend to be completely clear, show no signs of schorl root attachment but the larger crystals do.

The most likely suspending medium for double-termination is water passing through the pocket with sufficient force to cause turbulence and continual movement of the elbaite crystals such that they cannot remain in one position long enough to form attachments. When such crystal movement is

absent, as is commonly the case in elbaite-bearing pegmatites of Brazil, for example, interlocked growths of elbaite prisms are commonly encountered. Despite the abundance of elbaite prisms in Himalaya pockets, such intergrowths are rare.

FALL-LINE POCKET STRINGS

Evidence for mineralizing channels that were open for long periods appears in the strings of pockets that occur one after the other along the shortest dip line, or "fall-line," in the flat bodies of regional pegmatites. The fall-line represents the shortest route taken by mobile pegmatite ingredients toward the surface. Such strings are best developed in the Himalaya-San Diego bodies at Mesa Grande, where mining experience showed that as the main tunnel was driven to follow the pegmatite on the west side of Gem Hill, pockets were encountered at irregular intervals which changed in character insofar as coloration of the elbaites was concerned. It was found that other pockets could be encountered by mining up or down dip from such pockets, but mining pegmatite between the pockets generally found nothing.

Fall-line pockets seem to occur along wider rock openings, or lateral "rolls," of the kind created by differential movement of fissure walls (Jensen & Bateman, 1979, p.118). Such wider spaces would have provided the most rapid ingress and sustained flow of pegmatite constituents while the narrower openings between would have been plugged during early stages of injection and thus acted as barriers to any lateral transfer of constituents in later, hydrothermal stages. Concentrations of complex mineralization in rolls has been remarked upon in many studies of pegmatites, a notable "roll" body being the Pala Chief pegmatite atop Pala Chief Mountain, where the axis of the roll is horizontal rather than vertical.

In the Mesa Grande pocket strings, the pegmatite between is simple but that along the strings is complex, usually containing traces of lepidolite and other late stage species, even elbaite, as narrow veinlets interconnecting the pockets and establishing their common genesis along a fall-line that may extend several hundred meters. Broadly similar but distinct mineralizations occur from string to string, i.e., similar type crystals of elbaite but often differing in kinds of hues and their patterns. The strings may all connect to a common low source of hydrothermally-transported material but by the time this had been apportioned among the strings, distinctive color patterns had developed, presumably due to slight changes in chemical composition.

Because of the uniformity in color, size and other features of the elbaites in any given string, it suggests that when detachment of early-formed crystals from pocket roofs took place, it did so all at once. This argues for a tectonic shock that could transmit severe vibrations to many pockets at the same time, and perhaps further account for the fact that within all strings, the same detachments and subsequent regrowths are generally of the same character.

Fall-line pocket strings occur elsewhere, notably in the Ramona district where the sheetlike bodies resemble those of the Mesa Grande district but are much less complexly mineralized. Even in the much thicker but still flattened bodies of the Tourmaline King, Tourmaline Queen, and others in the Pala district, the same rule applies in prospecting: where a pocket is found, others are most likely to occur up and down dip.

As a final note, this paper confines itself to the sheetlike pegmatite bodies typical of the Southern California-northern Baja California region. Perhaps its publication will stimulate interest in the problems of renewed mineralization and other effects of tectonic disruption of pegmatite bodies and that future reports on specific pegmatite bodies will include information on such disruptions and their effects, if any.

ACKNOWLEDGMENTS

The following graciously permitted frequent visits to their pegmatite properties, mines, or prospects, and engaged in discussions of experiences in mining, opening of pockets, and opinions as to pegmatite evolution: Ramona district, the Late Louis B. Spaulding and son, Louis, Jr.; Mesa Grande district, Ralph R. Potter for older workings in the Himalaya pegmatite bodies, and William Larson, for the latest workings from the east side of Gem Hill; Tourmaline Queen Mountain mines, William Larson and Edward Swoboda; Hiriart Hill workings, Norman Dawson for the White Queen, George Ashley for the Vanderberg pegmatite; Pala Chief Mountain, the Elizabeth R. Mine, Roland Reed, who also took along the author to prospects he mined in Baja California. Throughout the period covered by this paper, frequent and stimulating discussions were had with Richard H. Jahns, and lately, with Eugene Foord and Edwin Roedder.

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MINUTES OF THE 743rd MEETING OF THE MSSC

The 743rd meeting of the Mineralogical Society of Southern California was held on December 10, 1999 in the Lecture Hall, Geology Building, Pasadena City College. Bob Housley called the meeting to order at 7:30 p.m. and Ron Thacker introduced Walt Bowser who spoke on "Mexico: Treasure House of Minerals"

Ron Pellar gave a Report from the CFMS meeting. Two items were of interest for the society. Dues for member societies have been increased, primarily to cover the new insurance policy which now covers member society sponsored shows. This will eliminate the need to purchase a separate policy for our shows. The second item of interest is that the Donnie Rice lawsuit has been settled.

The second order of business was the election of officers. For the Nominating committee, Ron Pellar presented the slate of recommended officers:

President:	Bob Housley
Vice President	John Schwarze
Secretary	Ron Pellar
Treasurer	Ron Pellar
2000 - 2001 Directors	Jim Schlegel
	Charles Freed
	Dave Smith

There being no further nominations from the floor, Carolyn Seitz moved we approve the slate by acclamation. Seconded by Bill Besse, it was approved unanimously.
 Ron Thacker moved that we make Bob Jones and John Sinkankas Honorary Members. The motion was seconded by Carolyn Seitz and approved unanimously.
 Bill Besse moved that we approve the minutes of the 10/17/99 Board of Directors meeting and the 742nd General Meeting. Ron Pellar seconded the motion; the motion was approved unanimously.

For the Show, Carolyn thanked the many members who donated their time to make the show the unqualified success that it was.

Bob Housley reminded us that the Installation Banquet is on 1/15/00 at Beckham Grill in Pasadena.

Ron Pellar announced the Show Award Winners. They are as follows.

Awards - Trophies

H. Stanton Hill Award	Chuck Houser
President's Award	Chad Stevens

Awards - \$50

Non-Dealer Theme	Martin Zinn
Non-Dealer, Non-Theme	Bill & Elizabeth Moller
Dealer Theme	Kerith Graeber
Dealer Non-Theme	John Siebel
Museum Theme	LA County Museum
Non-Theme	Jurupa Mountain Cultural Center
Junior Theme	Kelsey Stevens
Junior Non-Theme	Mike Schlegel

Bill Rader announced that he is going to Austin, Texas to start a graduate program and will not be able to continue as Program Committee chairman. We all wish him luck in Austin and hope he will stay in contact with us.

Bob reminded us of several upcoming shows listed in the calendar section of the Bulletin.

Jim Schlegel announced that he is working on field trips for this year. More to come.
 Jackie Stutz won the Door Prize and chose some calcite with sand inclusions. Roy Allmon, who chose a sample of fluorite from Xiang Hualin, Hunan Province, China won the Guest Door Prize.

The 743rd meeting of the MSSC adjourned at 9:10 p.m.

Respectfully submitted,
 David Smith, Secretary

MINUTES OF THE 744th MEETING OF THE MSSC

The Annual Meeting of the Mineralogical Society of Southern California was held on January 15, 2000 in conjunction with the Annual Banquet and Initiation of Officers at Pasadena, California. The meeting was called to order by President Bob Housley who introduced past Presidents of the MSSC, CFMS, and AFMS.

The H. Stanton Hill Trophy was awarded to Chuck Houser for his outstanding mineral case. The President's Junior Trophy was awarded to Chad Stevens who was not present to receive it. Cash award winners for exhibits at our show were also announced. All of the award presentations were made by President Bob Housley and Exhibit Chairman Ron Pellar. Wayne and Dona Leicht announced a sponsored Kristalle award of \$300 for the best Junior Mineral case to be exhibited at the 2000 show in order to encourage greater participation on the part of Juniors.

Show Chairman Jim Schlegel announced that a new MSSC trophy would be awarded for the "Best Single Mineral Specimen for the Show Theme" and would honor Gus Meister for all of his efforts and achievements on behalf of the MSSC.

Our acting parliamentarian, Gus Meister, installed all of the officers for the year 2000.

Carolyn Seitz introduced our speaker, Bill Larson of Pala International and the Collector, who gave an excellent talk on the ruby mines of Burma.

The meeting was adjourned at 9:45 p.m.

Respectfully submitted,
Ron Pellar
Acting Secretary

DUES ARE DUE !!

Please send to the Post Office Box, Attention, Ron Pellar, Treasurer.

It is with regret we learn of the passing of former member Marshall F. Humphrey, most recently a resident of Duarte, California

CALENDAR

February 18: MSSC monthly meeting, 7:30 p.m., Geology Building, Pasadena City College.

February 18 - 27: Indio, CA
San Geronio Mineral & Gem Society
Riverside County National Date Festival
Gem & Mineral Building
46-350 Arabia, 10 - 10 each day
Don Grisham (909) 845-1978

February 19 - 20: Stockton, CA
Stockton Lapidary & Mineral Club
Scottish Rite Temple; 33 W. Alpine Ave.
Sat 10 - 6, Sun 10 - 5
Jim Dunlap (209) 478-0747

February 26 - 27: North Hollywood, CA
Del Air Rockhounds - Sierra Pelona Rock Club
Woodland Hill Rockchippers, Valley Plaza Recreation Center, 12240 Archwood St, 10 - 5 both days
<http://sites.netscape.net/>

February 26 - 27: San Jose, CA
Santa Clara Valley Gem & Mineral Soc.
Santa Clara County Fairgrounds
344 Tully Rd, Sat 10 - 6, Sun 10 - 5
Mark Wartenberg (650) 568-6114
<http://www.slip.net/-ccox/scvgm>

March 3 - 12: Imperial, CA
Imperial Valley Gem & Mineral Society
Gem & Mineral Bldg (CA Midwinter Fair & Fiesta Grounds) 200 East 2nd Fri 12 - 10, Sat & Sun 10 - 10, Mon - Thurs 4 - 10
Jim Strain (760) 356-2361

March 3 - 5: Hayward, CA
Mineral & Gem Society of Castro Valley
Centennial Hall, 22292 Foothill Blvd.
Sat 10 - 6, Sun 10 - 5
Tom Ford (510) 792-2223

March 3 - 5: Phoenix, AZ
Maricopa Lapidary Society

Wild Horse Domes Event Center
Wild Horse Pass Road & 48th Street
(off I-10) Fri & Sat 10 - 6, Sun 10 - 5
Doug Duffy (602) 973-4291

March 4 - 5: Arcadia CA
Monrovia Rockhounds, Inc.
Arboretum of L. A. County at Ayers Hall
301 N Baldwin Ave
9 - 4:30 both days
Mark Carney (626) 303-6355

March 4 - 5: Ventura, CA
Ventura Gem & Mineral Society
Seaside Park (Ventura Co. Fairgrounds)
10 W. Harbor Blvd, Sat 9 - 5, Sun 9 - 4
Jay Baumier (805) 644-3962

March 11 - 12: San Marino CA
Pasadena Lapidary Society
San Marino Masonic Temple
Sat 10 - 6, Sun 10 - 5
Alex Sergienko (323) 258-1394

March 11 - 12: Turlock, CA
The Mother Lode Mineral Society
The Stanislaus County Fairgrounds
Fulkerth Road, Sat 10 - 6, Sun 10 - 5
Bud McMillin (209) 524-3494 &
Ted Magee (209) 571-3185

March 18 - 19: Vallejo, CA
Vallejo Gem & Mineral Society, Inc.
900 Fairgrounds Drive
10 - 5 both days
Dolores (Laylie) Mack (707) 644-3035

March 25 - 26: La Habra, CA
North Orange Cnty Gem & Min Soc
La Habra Clubhouse
200 W Greenwood, 10 - 5 both days
Don Ogden (909) 589-2456
donogden@aol.com

March 25 - 26: San Diego CA
San Diego Mineral & Gem Society
Spanish Village at Balboa Park
Al Bahr Shrine
5440 Kearney Mesa Rd
Sat 10 - 6, Sun 10 - 5
C. Everly, POB 208, Sun City, CA 92586

April 15 - 16: Boron CA
The Mojave Mineralogical Society, Inc
Boron High School Multi-Purpose Room
Sat 9 - 6, Sun 9 - 4

April 29 - 30: Santa Cruz, CA
Santa Cruz Mineral & Gem Society
Santa Cruz Civic Auditorium
10 - 5 both days
Pat Clarke (831) 479-8759

May 6 - 7: Bakersfield, CA
Kern County Mineral Society
Kern County Fairgrounds
10 - 5 both days
Gary Paddock (661) 589-3517

May 13 - 14: Reno, NV
Reno Gem & Mineral Society
Reno Livestock Events Ctr Exhibit Hall
1350 N. Wells Ave
Sat 10 - 5, Sun 10 - 4
John Peterson (775) 849-1522



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