

2015
SEPTEMBER – OCTOBER

2015 - 2016

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TUCSON GEM & MINERAL SOCIETY

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EXPLORE DISCOVER SHARE

President's Page



Welcome back! I hope every one of you had a wonderful summer, whether you were here in Tucson, or somewhere else. I look forward to hearing about your adventures. We had some great potlucks this summer – good food, good fellowship and rocks! Thank you to all who made those so enjoyable.

I am humbled that you chose me to take leadership this year, and I pledge to carry out that commission with diligence and integrity – and enthusiasm. Thank you!

In many ways, I feel like the “new kid on the block.” Many of you have far more years of experience in the club and with the Show. I value the perspectives

you bring to the table. You are, after all, the ones who have made TGMS and the Show what it is today.

With some of you, I have begun to “pick your brains,” to try and understand your perspectives on and ideas for both the organization and the Show. And I will continue to do that with as many as I can. Besides the great education it affords, it's fun - I get to hear a lot of great stories. I enjoy hearing how people got into the hobby, and some of the places it has taken them.

It's really amazing what we (TGMS) do every year. And it's amazing how well we do it. The size and complexity of the Show rivals anything of the sort in the world. And we do it with volunteers! That is something of which we can be proud. And I am proud to be part of TGMS! Did you know that two cities in China are currently fighting over the right to become known as “The Tucson of Asia?”

TGMS leadership will continue to explore new ways to let the community and the world know who TGMS is and what we do. One new tool is already beginning to bear fruit. Several new members learned about TGMS through the new website. As we continue to develop the site, I think it will become ever more effective at drawing people in. Thank you to Pat for all of the hard work she puts into it. If you have not explored the new site, go to www.tgms.org and spend some time looking around. Organized around the mantra, “EXPLORE – DISCOVER – SHARE” is a wealth of new content that describes who we are, what we do, and how to become part of TGMS.

Again, welcome back. I am looking forward to a great year as we EXPLORE, DISCOVER, and SHARE!

Keep on Rocking!

Mark Marikos
(president@tgms.org)

TGMS General Meeting – May 4, 2015

The General Meeting of the Tucson Gem and Mineral Society was called to order by President Diane Braswell at 7:30 p.m.

Visitors and new members were recognized and welcomed to the meeting.

SCHOLARSHIP PRESENTATIONS: Two recipients were each awarded a TGMS scholarship for \$5000.00. Anna Katharina Schuh is studying geology at the University of Arizona and is pursuing a career in mineralogy and gemology. Vincent LeBlanc has completed studies at Pima Community College and has been accepted at the University of Arizona, starting this fall to pursue a career in geology and mining. Congratulations to Anna and Vincent!

PROGRAM: Ron Gibbs, a mining engineer with Freeport McMoRan, has worked most of his career in Arizona and New Mexico. He is a longtime member of TGMS and is best known as a micromount collector. He also discovered a new mineral which has been named for him, Rongibbsite. Ron's topic was "As in AZ" about arsenic minerals in Arizona. Arsenic is the 20th most abundant element in the earth's crust. It is a poison and fatal if enough is ingested over time. Its main use today is as a doping agent in semiconductors. The standard for arsenic in drinking water is set at less than 10 ppb and in the Tucson basin it is generally 5 ppb. Reverse osmosis and distillation will remove arsenic from water. At values above 200 ppb, don't use the water for drinking; at 11-200 ppb, treat the water to remove arsenic; at less than 10 ppb, the water is okay for drinking. Arsenic bearing mineral types include the element, sulfides, oxides, arsenites, arsenates and arsenides. Native arsenic is found in Arizona at Washington Camp and Bisbee. There are 58 arsenic minerals in Arizona and Ron showed slides of various habits for many of them.

BREAK: Michael Hollonbeck provided refreshments including sandwiches, chips, salsa, cheese, beef sausage, taquitos, cookies and brownies. Many thanks.

LETTER TO MEMBERS OF TGMS FROM DONA LEICHT: Rick Trapp, Show Chair for mineral dealers, discussed some points in the letter which was published in Rock Talk. Dona Leicht is a longtime supporter of the Show and dealer whose company, Kristalle, is one of high-end mineral dealers. Rick stated that the Show Committee is planning for the future and is forward-thinking. They have considered changing the Show dates, but are hemmed in by contracts. Tucson Convention Center management decides a lot of things for which we have no choice. Most importantly, the TGMS Show is for everyone, not just high-end collectors, and has something for everyone including general retail as well as mineral dealers, plus Junior Education. The Show brings in all types of people. He stressed that we need to be sensitive to complaints and encouraged members to get more interested and involved in the Show.

SHOW CHAIR: Gloria Quigg was introduced as the new Show Chair.

OLD BUSINESS:

Approval of Minutes for March 2, 2015 and April 6, 2015 General Meetings as published in Rock Talk. **MOTION:** To approve as written. Seconded and approved.

Summer Potlucks: Dick Gottfried is hosting the Saturday, June 13th potluck from 4:00 to 8:00 p.m. at 825 S. Loyola Ave. Please RSVP to 520-584-0211 or fossilnut007@msn.com. A volunteer is needed for the July potluck which can be at the volunteer's home or the TGMS building. August has a host.

Field Trips: Kerry Towe reported some decent specimens were found at the JC Holmes Mine last Saturday, but the area was obviously picked over. Nothing is scheduled for May yet, but there may be a trip to Luna, New Mexico area this summer. Diane Braswell can take members for petrified wood, blue agate and carnelian near Alpine, Arizona. Kerry requested ideas and help for next year's trips.

NEW BUSINESS:

Budget for 2015-2016 Fiscal Year: The budget was distributed to the membership for review. **MOTION:** To accept the budget. Seconded and approved.

Lifetime Memberships: The Board recommended Diane Braswell and Bill Shelton for Lifetime Memberships. **MOTION:** To accept the Board's recommendations. Seconded and approved.

Election of Officers for 2015-2016: The ballot containing the Nominating Committee's recommended candidates for officers and directors was distributed to members. The President asked for nominations from the floor for all positions, but there were none. **MOTION:** To accept the Nominating Committee's slate. Seconded and approved.

Certificates of Appreciation were handed out to 2014-2015 Board Members.

DRAWING FOR DOOR PRIZES: Michael Hollonbeck, as meeting host, made the first choice. Drawing winners were Mike Braswell, Janet Rupp, Kerry Towe and Helen Serras-Herman.

The meeting was adjourned at 9:30 p.m.

Respectfully submitted,
Marilyn Reynolds, Recording Secretary

TGMS Board Meeting — April 11, 2015

Present: Ellen Alexander, Mark Ascher, Madison Barkley (via FaceTime), Diane Braswell, Alrene Hibben, Mark Marikos and Marilyn Reynolds.

Absent: Dick Gottfried and Jo Anne Sam

Staff: Pat McClain

The Board Meeting was called to order by President Diane Braswell at 9:14 a.m. in the GLHN conference room at 2939 E. Broadway.

Minutes Approval of the March 18, 2015 Board Meeting: **MOTION:** To approve the minutes as written. Seconded and approved.

Treasurer's Report: Income is \$183,585.82 and expenses are \$151,607.56.

Old Business:

New Show Chairperson: Regarding nomination of Gloria Quigg, there was a postponed amended motion made and seconded pending from the March 18th Board Meeting: To approve Gloria on condition she relinquishes Publicity Chair. **MOTION:** To approve Gloria Quigg as Show Chair. Seconded and approved. It will be recommended that she get assistance with publicity if she wishes to continue as Publicity Chair in addition to being Show Chair.

Property at Dodge and Ft. Lowell: The price to purchase the property is \$1,055,000. The property is very large, but the building is only approximately 1700 sq. ft. which is not large enough.

Lifetime Membership: Recommended were Bill Shelton, Paul Harter and Diane Braswell. Lifetime members must have contributed to the Society over a long period of time. **MOTION:** To approve Diane Braswell. Seconded and approved with one abstention. **MOTION:** To approve Bill Shelton. Seconded and approved. These recommendations will be submitted for membership approval at the May General Meeting. Mark Marikos will draft a letter of appreciation/recognition to be sent to Paul Harter and posted in Rock Talk and on the TGMS website.

Other Old Business: None.

New Business:

2015-2016 Budget: Membership fees and Adobe Bridge Club rent will be unchanged. Money is included to design the website to enable charging credit cards for membership fees and dealer fees. **MOTION:** To approve the budget. Seconded and approved. The budget will be presented at the May General Meeting for membership approval.

Scholarship Applications: Application letters were received from Vincent LeBlanc and Anna Katharina Schuh. **MOTION:** To approve both applicants for \$5000.00 scholarships. Seconded and approved. The unbudgeted \$5000.00 will come from the scholarship holding account. Money raised by raffling the donated ring at the 2016 Show will go to the scholarship fund. A suggestion was made to put a question on the membership form asking if the person wanted to make a donation to the scholarship fund. No decision was made on the suggestion.

Slate of Officers for 2015-2016: The following slate will be presented for vote at the May General Meeting:

President: Mark Marikos

Vice-President: Michael Hollonbeck

Recording Secretary: Marilyn Reynolds

Membership Secretary: Alrene Hibben

Treasurer: Ellen Alexander

Director: Dick Gottfried

Director: Jo Anne Sam

Director: Sara Day

Plan of Transition: Look at slate earlier in the year and, if someone is interested in a position, have them work alongside current person in the position. There is money in the budget for transition staff to learn the duties in the office. Pat reported that the office staff has records in place for everything and a schedule for duties related to the Show. Pat was requested to review the information at the next Board meeting.

Also to be considered is salary vs hourly wage for the position of Executive Manager.

Other New Business: None

Call to the Audience: No guests present.

Meeting was adjourned at 11:45 a.m.

Respectfully submitted by

Marilyn V. Reynolds, Recording Secretary

2016 Tucson Gem and Mineral Show®

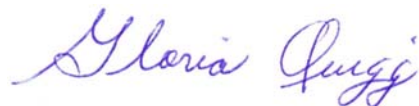
I am Gloria Quigg and I am the Show Chair for our 2016 Show. Many of you know me as the Publicity Chair and I'm still wearing that hat and sharing it with our past Show Chair, Paul Harter. This past summer has been a learning experience for me – getting to know the many Chairs on the Show Committee and trying to learn more about their jobs. Of course summer has been busy for everyone on the Show Committee. There are many things that need to go on behind the scenes and many decisions that need to be made. We really work year 'round.



Some of the things that we have worked on are the floor plans, the speakers for our lecture series, Junior Education, selecting a mineral photograph and a design for our Show Poster, and many other decisions that need to be made if the Show is to happen each year. One of those decisions was the booth fees for our dealers. Over the past few years we have tried to keep our prices stable but, due to increasing costs on our side, we had to make the decision to raise the fees that we charge our dealers. This is a decision that everyone took very seriously and, after a few proposals and much discussion, we made the decision to increase dealer fees 10% in 2016, 6 % in 2017 & 2018 and 4% each year after that. We will be able to keep these increases as scheduled only if our projected costs increase as anticipated. If our costs increase faster or more than expected, the Committee will revisit this issue.

Another decision we made was to increase the ticket price at the door. We have kept the cost at \$10.00 (\$9.00 + \$1.00 facility tax) for about five years. This year we decided that the cost would be \$ 13.00 (\$12.00 + \$1.00 facility tax) for a single day, \$21.00 for a 2-day ticket; \$2.00 off on Friday for senior citizens and military (active and retired); and we will offer a \$2.00 off coupon available from our website.

The Show Committee is very busy all year long and there are many opportunities for other people to get involved. "Volunteer sign-up " sheets will be out soon, look over the information and if you have any questions, contact the TGMS Office at tgms@tgms.org, the individual Chairs (or areas) that you are interested in or you can contact me at g14maz@centurylink.net. We will all do our best to provide you with more information about the area in which you would like to volunteer.



Gloria Quigg
2016 Show Chair



Shades of Blue
Minerals of the
World
February 11-14
2016

\$200 OFF
ONE ADULT GENERAL
ADMISSION
CHILDREN 14 AND UNDER FREE
WITH A PAYING ADULT
This coupon cannot be used with any other discount

Summer TGMS Potlucks – By P.R. McClain

This summer we had three really GREAT TGMS Potlucks!

The June 13th potluck was hosted by Dick Gottfried. It was held at his home ... books, fossils, rocks, food and lots of good conversations.

The July 11th potluck was hosted by Mark & Christina Markios and it was held at the TGMS facility. We held our “first” rock swap (or “let’s make a deal”) and, by all accounts, everyone enjoyed it so much we are going to try and have a few more during the course of the year.

The August 15th potluck was hosted by Henry Miller & Rick Fernadez at their

home. Another outstanding day, and it was one of the hottest days this summer. Good food, conversation, a pool table and rocks. We all had a great time!!

I need to say that something very special happened at the potlucks this year ... we found out that Henty Miller is very talented in many areas, but you should see his desserts!! We all love our rocks but Henry made a dessert topped with an edible “geode.”



Letters From My Mentor – By Anthony J. Albini**Richard Schooner & Tony Albini**

January 5, 1984

Dear Tony,

I received a letter from Bob (Brandenberger, AJA) too, with the same suggested visit. The real problem is that I'm way up here, in the extreme northeastern corner of the state, and it's therefore not practical to make dates or appointments. Lately, I haven't been in East Hampton. My finances, always very shaky, keep me off the road, most of the time. In addition to the cost of fuel, there's always the fear of major breakdowns. I'd have to walk away and leave the car ... and that's just not my style at all! Aside from the sale of parts of my collection, plus gifts from several friends, the past few years, I wouldn't even have a car registered.

I'm sure I'll get to Bob's and certainly I'd like to get to your place but I don't think it's very imminent. I'm truly sorry.

I haven't managed to get to Wesleyan since last June (early June)!

Pete Dunn studied my railroad cut "danalite" and concluded it's spessartine! However, I went over the X-ray pattern of the pink mineral from the Strickland quarry, mentioned the day we met, and it appears to be genthelvite (all the right peaks). I must stop coming up with oddities at the Strickland quarry. I doubt there's another pegmatite in the world with such a long list of species (well over a hundred), and the country rock is also rich in species.

Also, the Pelton quarry, source of magnificent beryl crystals, chunks of bismutite, deep red samarskite crystals (spectrographic analysis says, yes) fergusonite, etc., has been defunct for twenty years. A house was built right over it. The fergusonite crystals were found, loose, when the dumps were being bulldozed. It was "around the corner" from the Strickland quarry: cross Carr Brook, turn right, go for a mile or a mile and a half, almost to the junction with the road over Penfield Hill, and it was on the bank on the right. A riding stable used to be located there. Sorry! It was in the Glastonbury Gneiss, like the Hale-Walker, Gotta-Walden, Spinelli, and Hollister locations...yes, and the Case quarries.

I sure do miss the Hollister quarry! I know the other pegmatite you mean, near the pipeline. At the bottom of the hill, where the pipeline came off that loop; some superb epidote crystals were found, loose, in the dirt, long ago. Also some excellent matrix yellow titanites. I once saw a trace of red fluorite at the Hollister quarry (also at White Rocks). Gillette quarry was the place for that! But it was so fragile that large pieces were rare.

Anything on the museum job? I did write.

I had a nice little letter from the Governor (Bill O'Neill, AJA) (on a "Dick" and "Bill" level), but it didn't concern mineralogy. I don't blame Bill for the situation on a State mineralogy; the fault is with Stanley Pac and Sid Quarrier (ironic name, AJA).

Russ [Behnke, AJA] says he'll get the pictures we need. What an ordeal it's been! I'm an experienced photographer, myself, but not with the least experience with close-ups, no equipment either.

I got my information on South Glastonbury quarries from Bobby Ulm's mother. Maybe she'd help you out. She came from the Andrews family who were in the feldspar business. I think the Wiarda Quarry has a house almost on it. But it's certainly in the right location, more or less. If superb rose quartz had been present would they have left big chunks lying around? Doubtful! Could the Simpson quarry be the one I found the quarter-inch brown euxenite crystals, long ago? I walked into the woods, heading toward Glastonbury, across from the entrance to the Hale Quarry property. The quarry was in the side of a knoll: an opening into the knoll, as I remember.

Letters From My Mentor – By Anthony J. Albini ... CONTINUED

David Seaman's old article on the Walden gem mine mentioned yellow and black zoning which he said were microlite on pyrochlore. I don't know if he was sure. I thought Brian Mason, then curator at the American Museum, had checked it out. Yes, I could have John Gillespie check the Swanson mine manganowhatever [analyses by Petr Cerny of the University of Manitoba showed that both columbite-(Mn) and tantalite-(Mn) occur there, AJA] Not right now though! I just recently sent him a half a dozen samples. He's a very nice guy, sincerely in cleaning up problems; rare metals are his great love. I hated to see him move from New York to California ... though he's in Hemet, right in the monazite-allanite belt.

Sorry to hear about the access problem in the Larsen Pond area. I figured it would be in your backyard. A syenite, composed of microcline and arfvedsonite, could have some rare mineral potential, you know. Geologists wouldn't necessarily see rare accessories. Look at the Rt. 9 cut south of Higganum: a nepheline dike, somewhat altered, and they never spotted its rare Na-rich nature. Thank God I collected so many specimens, back in the late 60s!

The only time I was at the Bordonaro quarry, long ago, I followed the road in from the back of the Hale quarry (the Wannerstrom quarry, I think). It's between there and Cotton Hill Road. I didn't spend long there. I did find small uraninite crystals in manganapatite [fluorapatite with manganese, AJA]. Have you looked over the Gotta-Walden quarry? In the contact zone, again long ago, I dug out a six-inch mass of crude intergrown allanite crystals superficially altered to cerite (x-ray).

Cordially,

Dick.

Note from Anthony: This is from a series of letters from the late Richard Schooner, the person who knew more about central Connecticut mineralogy than anyone else. The letters date back to 1979 ... Richard was my mentor and we went field collecting with each other over 200 times.



STRICKLAND QUARRY



Shades of Blue: Minerals of the World



Our 2016 Theme of **"Shades of Blue: Minerals of the World"** is a bit of a detour from our traditional mineral species/groups and locality themes; perhaps most akin to Mineral Oddities and Fluorescent Minerals in the sense that it transcends obvious pigeonholes and leaves a lot up to the exhibitors imaginations. It is hard (impossible???) that's a challenge) to think of a mineral group that does not have a blue member: zeolites have cavansite; native elements have blue diamonds; sulfides have covellite, halides have halite, silver minerals have boleite, and the silicates, carbonates and oxides have myriad examples ... and that's before we start talking inclusions and trace element coloration. And of course there are species that fluoresce blue. Arizona is of course exceptionally endowed with blue minerals and is the type locality for several copper oxide species whose color rivals our skies on a summer's day. I would wager that a high percentage of TGMS field trips over the years featured blue minerals.

This theme should draw some really fun ... and visually spectacular exhibits ... and I am already (!) getting requests for focus cases from museums and folks who really want to play along. Start conjuring up images of a case littered with top color Yogo Sapphires, rows of azurites from Arizona localities, and aquamarines in every shade of blue imaginable. Might also be fun to bring the musical Blues to our show, drawing in folks who might not otherwise come to our Show. Chicago Blues, New Orleans Blues, Texas Blues and Delta Blues are well known ... why not Tucson Blues?

This theme should also be perfect for TGMS members to play to! And in case you didn't notice, we established the Bill and Millie Schupp Trophy this year for the best exhibit put in by a TGMS member, and FM has an award for the best Educational exhibit (why is the sky ... and azurite ... blue?) so there's good potential for recognition of your efforts. Both guest and competitive cases qualify for both ... and it sure would be fun if a TGMS cooperative group-shoot case won! (As I said last RT ... I'll put in a rock or two if someone wants to organize this case ... Wayne might even agree to line it!)

So mark your calendars, check out your azurites, crank up BB on the stereo and get ready to volunteer to get the "blues" as soon as the lists go out!



Peter Megaw
Special & Guest Exhibits Chair

**DON'T FORGET OUR TGMS EXHIBIT CASE ENDOWMENT
WE NEED YOUR SUPPORT! LINK: <http://goo.gl/VSnvf9>**

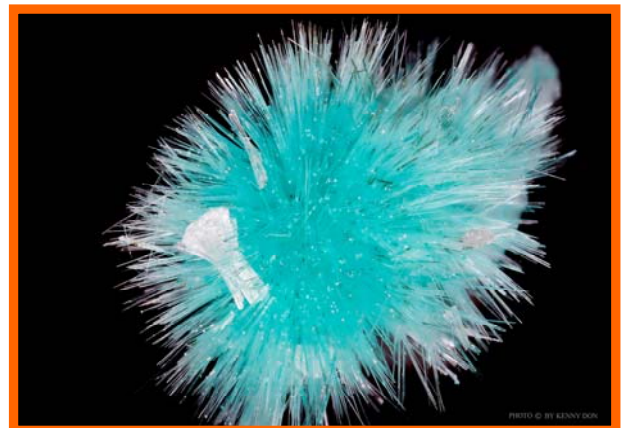
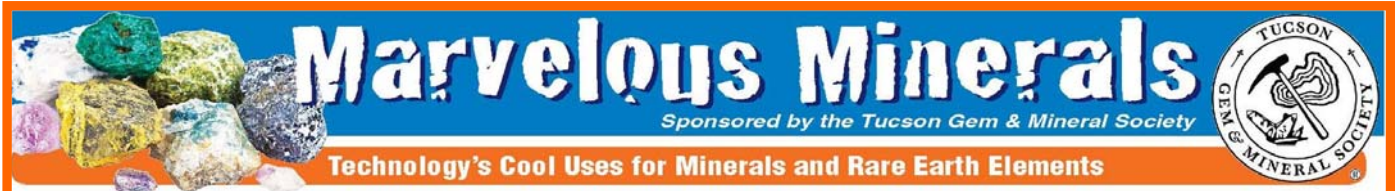


Photo by : Ken Don

Community Outreach — By P.R. McClain



Your Gadgets' Ingredients!

They are flat and sleek, yet are surprisingly powerful and oh so much fun! But it's not just the apps and operating systems that make your cell phone, tablet, laptop and flat-screen TV so cool and functional.

Even if your device seems simple, inside are all sorts of components requiring specific minerals to produce them.

For example, the plastic case and keyboard need calcium carbonate as an additive, which usually come from crushing limestone or marble. Titanium oxide, used to make plastic white, comes from rutile and ilmenite. Ammonium polyphosphate also is used to create plastics and requires apatite as its phosphate source.

LCD (liquid crystal display) computer monitors and TVs need lead, which comes from minerals like galena, cerussite and anglesite. Thin film transistors inside need silicon, which comes from quartz. And the ferro electric liquid crystal requires iron, which can be made from hematite. Printed circuit boards and computer chips mounted to them require silicon, copper, gold, silver, tin and aluminum!

Some of today's technology relies on rare earth elements, a group of 17 metals that are difficult to extract and refine. But what makes them cool is that even in tiny



amounts, rare earth elements can greatly improve the properties of an alloy's principal ingredient. So they can make things like your cell phone or silicon chips work dramatically better. Gadolinite, xenotime and monazite are some source minerals for rare earth elements.

China produces almost all of the rare earth elements used today.

Rare Earth Metals:

Light Rare Earths—
lanthanum, cerium,
praseodymium,
neodymium, promethium, samarium.

Heavy Rare Earths—
yttrium, europium, gadolinium, terbium,
dysprosium, holmium, erbium, thulium, ytterbium, lutetium.

For more info go to www.tgms.org or call TGMS at **(520) 322-5773**

Help support the TGMS School Visit Program. Call us to find out more!

The Tucson Gem and Mineral Society has sponsored an article in Bear Essential News for almost two years ... this article is for the month of September. Thought you might like to see what we have been doing.



Gloria Quigg, Rose Marques and myself participated in Oro Valley's Non-Profit Fair in August.

It is a great way to get the word out about the Society, Show and all of the things that we are involved in ... fun!

ROCK TALK

Encouraging the interest and study in geology, mineralogy, lapidary and allied earth science.

FROM:

T.G.M.S.
P.O. BOX 42588
TUCSON, ARIZONA 85733



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Tucson, AZ 85733

Phone: 520-322-5773
Fax: 520-322-6031
Email: tgms@tgms.org



PURPOSE: To encourage interest and study in geology, mineralogy, lapidary, and allied earth sciences.

Meetings: Usually the first Monday of the month, starting at 7:30 p.m., except September (second Monday because of the Labor Day holiday), June-August (potlucks). The TGMS facility address is: 3727 East Blackledge Drive, Tucson, Arizona 85716

The Tucson Gem and Mineral Show ®:

The second full weekend in February, starting with Thursday.

Affiliations: American Federation of Mineralogical Societies, Inc. (AFMS), Rocky Mountain Federation of Mineralogical Societies (RMFMS), Visit Tucson, Tucson Metropolitan Chamber of Commerce (TMCC), Greater Oro Valley Chamber of Commerce

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