

# **SAN DIEGO ASSOCIATION OF GEOLOGISTS**

<http://www.sandiegogeologists.org>

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## **SDAG MEETING ANNOUNCEMENT**

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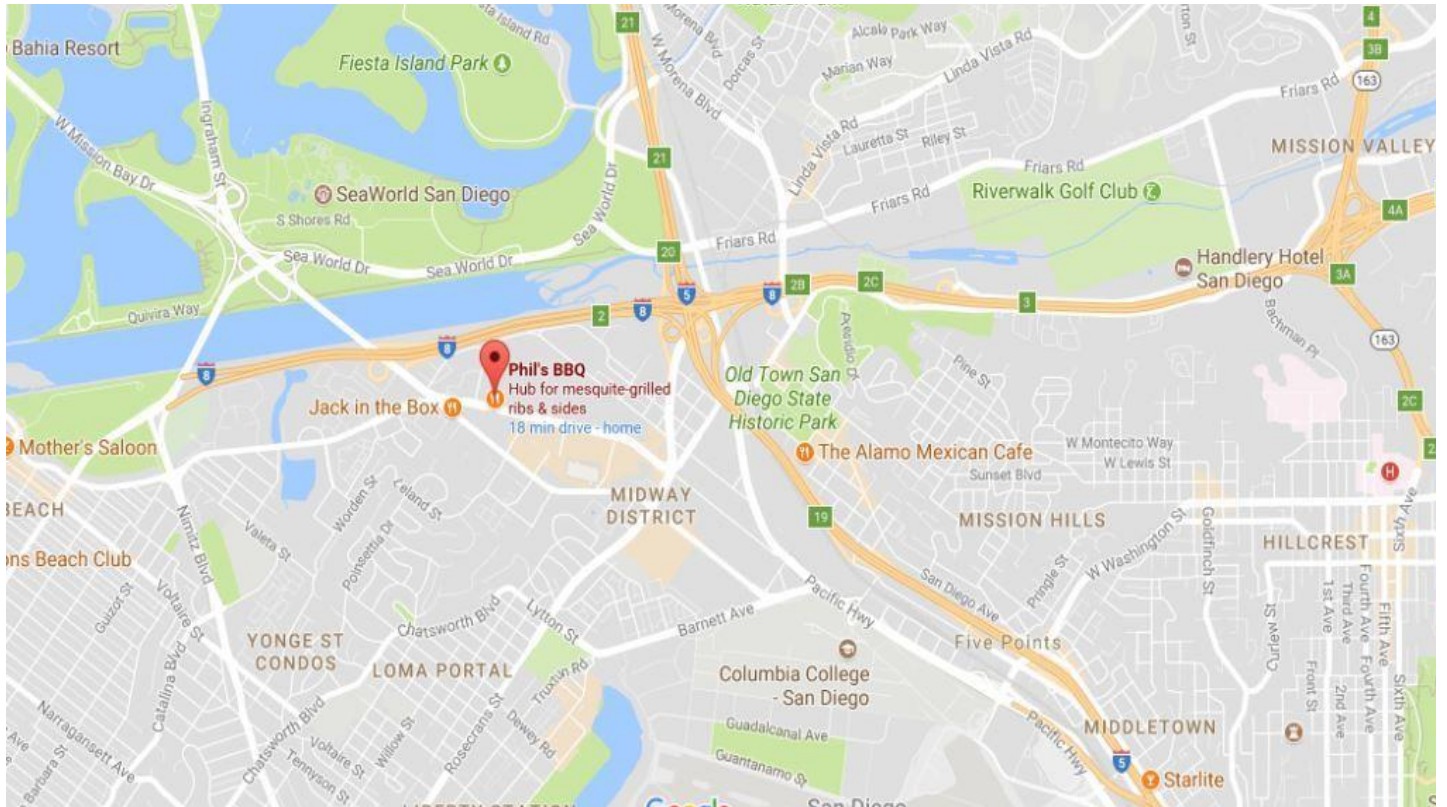
**Tuesday, November 14, 2017 \*2<sup>nd</sup> Tuesday\***

**Geologic History of Mission Trails Park**

Presented by: **Pat Abbott, Ph.D.**

- Where:** **Phil's BBQ – Point Loma (Event Center)**  
3750 Sports Arena Boulevard, San Diego, CA 92110 (See Map)
- When:** 5:30 pm – Social Hour  
6:30 pm – Dinner  
7:30 pm – Program
- Dinner:** Pulled Pork and Tri-Tip Sandwiches or Veggie Burger. Cash Bar.
- Cost:** \$35 Member, \$40 Non-Member, \$20 Students.  
Add \$5 if you did not make a reservation.
- Reservations:** Make your reservation **online** at [www.sandiegogeologists.org/meetings](http://www.sandiegogeologists.org/meetings) no later than noon, Monday, November 13<sup>th</sup>. Reservations cannot be guaranteed after Monday at noon, but are always preferred over walk-ins. **EARLY reservations well before the deadline are MUCH appreciated.**
- Directions:** **FROM INTERSTATE 5:** Take Camino Del Rio South (Exit 20) south towards Rosecrans Street. Make a right onto Sports Arena Boulevard and head west for approximately 0.7 miles. The restaurant is on the right hand side (see Map).
- FROM INTERSTATE 8:** Head west past Interstate 5. Take West Mission Bay/Sports Arena Boulevard (Exit 1). Make a left under the freeway and another left at Sports Arena Boulevard. The restaurant is on the left in approximately 0.2 miles (see Map).

## Map:



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## ABSTRACT

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Mission Trails Regional Park is more than 9,500 acres of mountainous wilderness, with 60 miles of trails, lying within the City of San Diego. A new, comprehensive geologic study reveals new discoveries placed within four phases of geologic history. (1) 126 to about 90 million years ago (mya). Magmatism builds mountains. Radiometric dates bring non-intuitive surprises! (2) 90 to 57 mya. Erosion carves the landscape into a hilly terrain aided by tropical weathering. (3) 57 to 34 mya. San Diego landscape buried as the Ballena River brings gravels and sands that build a massive alluvial fan/fan delta under a semi-arid climate. (4) Erosion dominates once again creating water gaps and wind gaps; stream piracy; rotational slump landslides; Ice Age paleosols.

A new, full color 8.5" x 11" geology book with about 120 photos and line drawings will be available for purchase. All proceeds go to the Mission Trails Regional Park Foundation, a 501(c)3 organization.

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## ***SPEAKER BIO***

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Pat Abbott has Ph.D. degree in geology from The University of Texas at Austin. He was a long-time Professor of Geology at SDSU. Currently he is an author for McGraw-Hill (*Natural Disasters*, 10 editions) and Sunbelt Publications (*The Rise and Fall of San Diego*) and he leads journeys to all continents and across all oceans for The Smithsonian.

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## **UPCOMING MEETINGS**

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Meetings are usually held on the 3<sup>rd</sup> Wednesday of the month may change to accommodate the speaker and meeting place schedules. Check the SDAG website for updates

December 13, 2017 <i>*2<sup>nd</sup> Wednesday*</i>	San Diego Natural History Museum Featuring: Tom Deméré
January 17, 2018	TBD
February 21, 2018	TBD

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## **2017 SDAG EXECUTIVE COMMITTEE**

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<b><u>PRESIDENT:</u></b>	Rupert Adams; <a href="mailto:adams@geoconinc.com">adams@geoconinc.com</a>
<b><u>VICE PRESIDENT:</u></b>	Chris Livesey; <a href="mailto:liveseychris@yahoo.com">liveseychris@yahoo.com</a>
<b><u>SECRETARY:</u></b>	Ken Haase; <a href="mailto:secretary@sandiegogeologists.org">secretary@sandiegogeologists.org</a>
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<b><u>PUBLICATIONS:</u></b>	Lowell Lindsay; <i>Sunbelt Publications</i> ; Ph: (619) 258-4911, x111; <a href="mailto:llindsay@sunbeltpub.com">llindsay@sunbeltpub.com</a>

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## ***SDAG PRESIDENT'S CORNER***

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Greetings SDAG members!

Thank you to all those who contributed to, and attended last month's annual field trip to the Ramona/Julian area. As always, an enjoyable time was had by all! Chris expertly managed taking the P. G. exam, leading the fieldtrip, and expanding his family with twins, all in the same month!

The completion of the field trip brings us to the final two meetings of the year. This month brings an update on the geology of Mission Trails Park from Dr. Pat Abbott. Our Christmas meeting will feature our annual paleontological update from Dr. Tom Deméré at our favorite venue, the San Diego Natural History Museum. Details for both meetings are included herein, so sign up as soon as possible!

As always, please feel free to contact me at [adams@geoconinc.com](mailto:adams@geoconinc.com) if you have questions, suggestions etc. regarding all matters SDAG related

I look forward to seeing everyone again on the 14<sup>th</sup> at Phils BBQ!

Regards,



**Rupert Adams PG, CEG** | *Sr. Project Geologist/SDAG President*

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6960 Flanders Drive, San Diego, California 92121

P|858.558.6900 ext. 234 M|858.260.1214

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## **2017 SDAG field trip, Julian-Banner Mining District -A Road to Gold-**

From Chris Livesey:

For those who could not attend the field trip, the event was enjoyable and the weather, although hot and windy on Saturday, was bearable. We hiked vigorously and enjoyed talks regarding geology, mineralogy, ecology, and history. Geologic jokes were exchanged throughout the trip!

I had a lot of fun orchestrating the field trip and, at the least, I hope everyone enjoyed the trip. I wanted to express my gratitude to all who attended the field trip and worked alongside me. A lot of planning and help was incorporated into our annual field trip(s) and guidebook(s). In no particular order, I would like to express my gratitude to all that helped: Jen Livesey (who allowed me to spend copious time and effort into the trip, despite the fact she was incubating our twin boys, with a due date of October 11-18 and delivered at a convenient week later, so I could fulfill my duties) Pat Abbott, Bill Elliot, Mike Thacker, Monte Marshall, Monte and Diane Murbach, Martin Learn, Lowell Lindsay, Bob Stroh, Adam Avakian, Ken Haase, Jen Morton, the operation staff at Hollow Creek Ranch, Toni and Mike Menghini, Carole and Mike Ziegler for sponsoring the Menghini wine during Saturday night, The San Diego Historical Society, Gemological Institute of America, JR Morgan, Dave Kimbrough, Marty Grove, and Mike Jensen.

I wanted to leave you with a memory, that I enjoyed for some peculiar reason. During the second stop, near Hollow Creek Ranch (who allowed our attendees to park on their property) our vehicles surreptitiously, by no premeditated intent, corralled a Rafter (group of wild turkeys) for a brief moment. As the jokes continued to roll through the stops, some one yelled out:

What is a turkey's favorite rock?



**Cobble! Cobble!**



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## **ANNOUNCEMENTS**

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Thank you to all of the 2017 Field Trip Participants. SDAG enjoyed a wonderful trip to Julian led by our Vice President Chris Livesey whose wife just had twins! Congratulations Chris and thank you for a great trip!



***2017 SDAG Field Trip Participants at the Eagle Mine, Julian, CA***

A link to more pictures taken by Rob Hawk here: [SDAG 2017 Field Trip Pictures](#)

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### **2018 SDAG Field Trip Preliminary Information**

We are always looking ahead to next year's field trip. Ken Haase will be leading the expedition. Our area of focus will be the **San Andreas Fault, Rainbow Basin, and Calico Mountain area**. Our target dates are middle to late October of 2018.

We are looking for anyone who has knowledge or interest in those areas to assist in developing part of a program to lead the trip. Send in your ideas, papers, and opinions to Ken Haase at [haase@geoconinc.com](mailto:haase@geoconinc.com).

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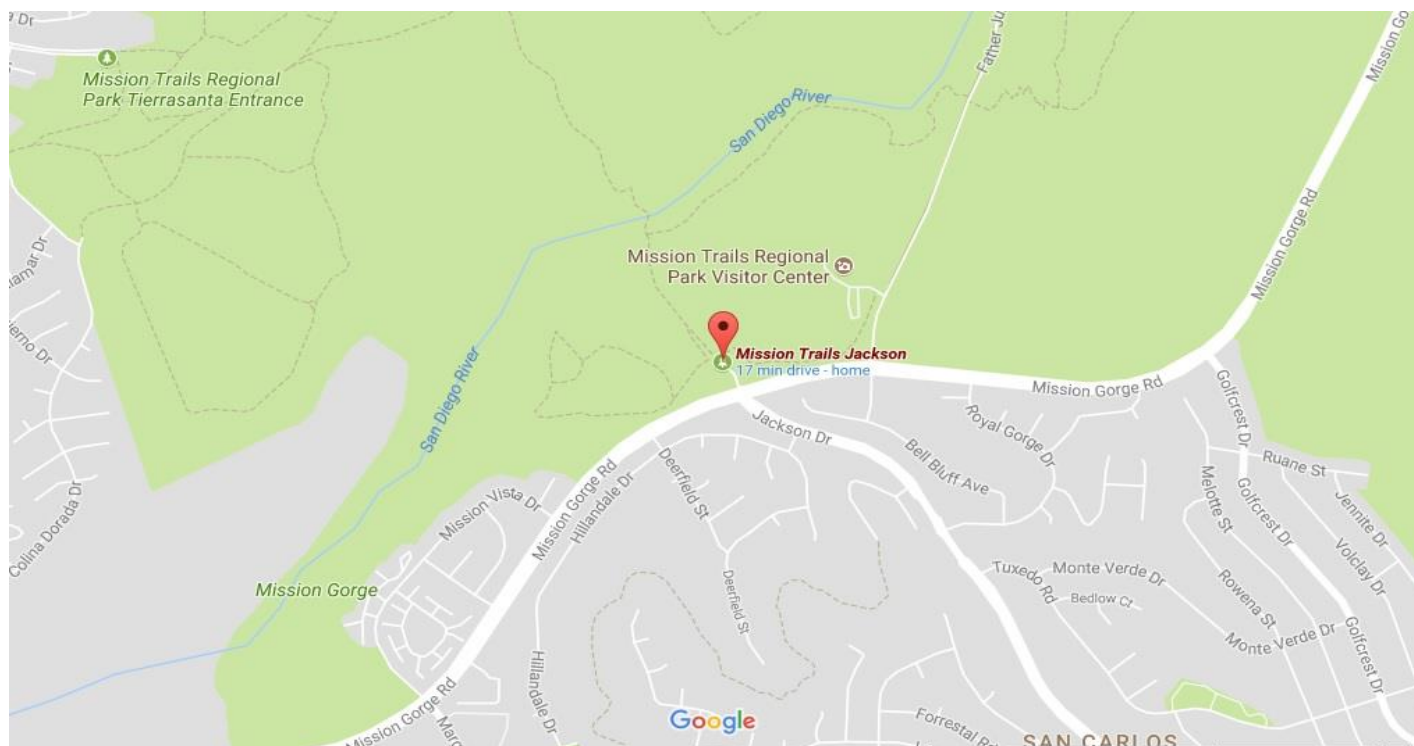
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## ONE STOP WONDER ANNOUNCEMENT

On November 18<sup>th</sup> at 9:00 am, following the November 14<sup>th</sup> lecture, Pat Abbott will lead a one-stop wonder into Mission Trails Park, weather and San Diego River levels permitting. We will meet in the parking lot at Mission Gorge Road and Jackson Drive and see:

- (1) Santiago Peak Volcanics (SPV) in fault contact with monzodiorite with 13 million years of missing history
- (2) SPV with relict soil (paleosol) beneath Eocene sedimentary rocks
- (3) A large rotational slump
- (4) View four different plutons -- and be home in time for lunch

### Map of meeting location:



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## Geological Society of America Annual Meeting

[www.geosociety.org](http://www.geosociety.org)

**2018**

Field Trip Proposal Deadline: December 1, 2017

Technical Session/Short Course Proposal Deadline: February 1, 2018

Abstract Deadline: August 14, 2018

Meeting: November 4<sup>th</sup> to 7<sup>th</sup> 2018, Indianapolis, Indiana

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## SDAG DECEMBER WINTER BANQUET



The annual SDAG Winter Banquet is almost here! Once again we will be hosting the event at the San Diego Natural History Museum. Tom Deméré will once again be giving a talk in the comfort of the indoor amphitheater. We have a great menu lined up for this year so when signups are available in early December please get them in! We will have access to the 2<sup>nd</sup> floor exhibits and a cash bar will be available. E-mail Rupert Adams (SDAG President), [adams@geoconinc.com](mailto:adams@geoconinc.com) or Ken Haase (SDAG Secretary), [secretary@sandiegogeologists.org](mailto:secretary@sandiegogeologists.org), with any questions. See you there!

**When:** December 13, 2017 (\*2<sup>nd</sup> Wednesday\*)

6:00 pm – Social Hour

7:00 pm – Dinner

8:00 pm – Program

**Where:** San Diego Natural History Museum

**Who:** Tom Deméré, Ph.D.

Curator of Paleontology/Director of Paleoservices

**Cost:** \$40 for Members

\$45 for Non-Members

\$25 for Students

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### **Menu:**

Main Course: Sirloin Tip Roast, Seared Chicken  
or Vegetarian Dish (TBD)

Sides: Field Greens w/Gorgonzola Cheese  
(Dried Cranberries, Grapes, Cucumbers, Candied  
Walnuts, Raspberry Vinaigrette)

Roasted Vegetables

Garlic Smashed Red Potatoes

Assorted Rolls w/butter

Dessert: Peppermint Brownie

Gourmet Cookies

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## Yonder Dynamics – UC San Diego Student Robotics Organization



Allison Kubo is the Science lead for Yonder Dynamics a university rover team at UC San Diego and an Earth Science student at Scripps. She reached out to SDAG looking for sponsors for their rover this year. Part of the competition is an analysis of the geologic settings of the area and soil retrieved by the rover which incorporates soil moisture, conductivity, and chemical testing.

She would be happy to partner with SDAG or anyone interested in the project.

Here are links to the team's website and sponsorship package:

[Yonder Dynamics](#)

[Yonder Dynamics Sponsorship Package](#)

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### SDAG Research Tool

**SDAG RESEARCH TOOL** - A comprehensive listing of all papers published by SDAG, whether as annual field trip guidebooks or special publications, is now available on our website. Entries are sorted by primary author, or chronologically by date of publication, from our first guidebook in 1972, up the San Luis Rey River in 2013, from Coast to Cactus in 2014, and finally over the edge to the Coyote Mountains in 2015. These can be accessed or downloaded as .pdf files. They are fully searchable in Adobe Reader or Acrobat, so if you are researching a topic, "tsunami" for example, you can search for that keyword. This listing will be updated as new books are published. Thanks to Greg Peterson and Hargis + Associates, Inc., for making this possible. See the links below:

[http://www.sandiegoeologists.org/SDAG\\_Pubs\\_authors.pdf](http://www.sandiegoeologists.org/SDAG_Pubs_authors.pdf)

[http://www.sandiegoeologists.org/SDAG\\_Pubs\\_chronological.pdf](http://www.sandiegoeologists.org/SDAG_Pubs_chronological.pdf)

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## **Interactive Fault Map for San Diego**

As part of the update for the San Diego-Tijuana Earthquake Planning Scenario, Working Group No. 1's "Fault Map Subcommittee" has completed the first publicly available bi-national active and potentially active fault map. This interactive GIS map includes the first publicly available active and potentially fault map locations from the City of San Diego. The City of San Diego fault locations and activity of faults are based chiefly on interpretation of information contained in geologic reports by private consultants. The City of San Diego identifies active faults as Holocene ( $\leq 11,000$ yr) and potentially active as Quaternary (up to 1.6my). City of San Diego fault investigations are ongoing that may require future revision of this map. This map is not a substitute for a site specific fault investigation. The map also includes an updated fault map layer from the State CGS. CGS suggests users defer to the City of San Diego fault data, where marked, for increased accuracy. The map also integrated the faults south of the border for a bi-national cross border view. You can expand the map legend on the left side to see the fault ages and sources for each layer that can be turned on or off for the map view. You can select from 1 of 12 base maps. You can click on the fault line on the map to see the meta-data source. This map includes the yellow dashed SURFACE FAULT RUPTURE location layer that will be used for the infrastructure, social, and economic impacts and emergency response for the update to the Earthquake Scenario. In addition, active and potentially active fault investigation locations from private companies are planned to be added to this map as a resource. This map is an on-going project and resource as our knowledge increases about local active and potentially active faults.

The link is available at: [http://www.sandiegoengineers.org/Faults\\_map.html](http://www.sandiegoengineers.org/Faults_map.html)

I would like to thank Carolyn Glockhoff for her endless GIS work, Jim Quinn and the City for providing their data and time, Jerry Treiman with CGS for his time preparing the Surface Rupture and providing their new State fault data layer, and Luis Mendoza at CICESE for providing the faults south of the border. Please contact Diane Murbach ([dianemurbach@gmail.com](mailto:dianemurbach@gmail.com)), Chair for the SD-TJ Earthquake Scenario Working Group #1 - Earth Science, if you have any questions, or see any errors on this new fault map.

**Diane Murbach** (619) 865-4333

Engineering Geologist, C.E.G.

[www.murbachgeotech.com](http://www.murbachgeotech.com)

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## **Request for 2018 SDAG/SDGS Publication Sponsors**

On behalf of the San Diego Geological Society, Inc. (SDGS), a public benefit 501(c)3 nonprofit educational corporation, we would like to request tax deductible Donations for our San Diego Association of Geologists (SDAG) group. The list of paid Sponsors and the forms to become a Sponsor are located on the SDAG web site at: <http://www.sandiegogeologists.org/Sponsors.html>.

Your donation will further the SDGS mission to promote geology and related fields in the greater San Diego region, operating through the San Diego Association of Geologists (SDAG), a committee of SDGS. To achieve our primary educational objective, we organize frequent field trips and maintain a program of monthly meetings featuring speakers on current geological topics. We also publish field trip guidebooks and other publications related to geology and natural history. We encourage scholarship and research by awarding scholarships from the elementary through graduate levels. With your \$100 "EMERALD" donation, your name/business will be listed as a sponsor on the SDAG web site (<http://www.sandiegogeologists.org/>) and in the monthly SDAG meeting newsletters. With your \$500 "RUBY" or \$1,000 or more "DIAMOND" level donation, your business card will also be included on the SDAG web site and in the monthly SDAG meeting newsletters. In addition, as a "\$1,000 or more DIAMOND" level donation you will be presented with a thank you plaque.

Should you have any questions regarding a Sponsorship, please contact our non-profit SDGS Secretary (Diane Murbach) at 619-865-4333.

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## **Call for Articles**

SDAG invites members to submit articles on their current research or an interesting project they are working on for publication in the monthly newsletter. The article should be no more than 1 page in length. Photos are welcomed; too. Please submit articles to the SDAG secretary via email.

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## PHOTO OF THE MONTH

If you would like to submit a photo, email them to [secretary@sandiegogeologists.org](mailto:secretary@sandiegogeologists.org) and I will try and put them in the newsletter. Provide a short description of the picture.



Five Stamp Mill – Eagle Mine in Julian. Photo Credit: Rob Hawk

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