



# SAN DIEGO ASSOCIATION OF GEOLOGISTS

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

**SDAG MEETING ANNOUNCEMENT**  
**Wednesday, September 21, 2005**

## ***GEOCHEMISTRY OF COASTAL GROUND WATER*** ***SAN DIEGO COUNTY, CALIFORNIA***

*presented by*  
**Wes Danskin**

Research Hydrologist, U.S. Geological Survey

**Where:** Tom Ham's Lighthouse Restaurant  
2150 Harbor Island Drive  
San Diego, CA 92101  
(619) 292-9110

**When:** 6:00 pm – Social Hour  
7:00 pm – Dinner  
8:00 pm – Program



**Directions:** Tom Ham's is located at the west end of Harbor Island. From Harbor Drive turn south onto Harbor Island Drive. At the second light turn right. Go to the end.

**Dinner:** A yummy buffet spread. The buffet includes Roast Beef, Roast Chicken, Pasta Alfredo, veggies, rice, a huge salad and fruit spread, dessert, and a beverage.

**Cost:** \$25.00 per member/guests, \$15 per student. Add \$5.00 if you make no reservation.

**Reservations:** Make your reservation online at [www.sandiegoeologists.org](http://www.sandiegoeologists.org) or call the SDAG Reservation Hotline at (619)255-8380, **no later than 8:00 a.m. Monday, September 19<sup>th</sup>**.

**RESERVATIONS CANNOT BE ACCEPTED AFTER Monday AT 8 AM.**  
**IF YOU DO NOT MAKE A RESERVATION, WE CANNOT GUARANTEE YOU A MEAL.**

### **2005 EXECUTIVE COMMITTEE**

**PRESIDENT** - Margaret R. Eggers; *Eggers Environmental, Inc.*; Ph: (760) 757-7711; [meggers@eggersenv.com](mailto:meggers@eggersenv.com)  
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**WEBMASTER** - Carolyn Glockhoff; *Caro-Lion Enterprises*, Ph: (858) 549-3396; [carolyn@caro-lion.com](mailto:carolyn@caro-lion.com)

## BIOGRAPHICAL SKETCH: WES DANSKIN

**Wes Danskin** is a Research Hydrologist with the U.S. Geological Survey. During his 25-year career with the USGS, Wes has focused his research on developing improved water-management techniques and providing a more comprehensive understanding of regional ground-water systems. His study areas include Owens Valley, San Bernardino basin, and Temecula basin in California; the Middle Rio Grande basin near Albuquerque; coastal subsiding aquifers near Houston; the Kenai Peninsula in Alaska; and most recently the country of Jordan. Studies commonly involve analysis of depositional structure, development of ground-water flow and constrained-optimization models, and installation of real-time monitoring equipment. Wes' educational background includes receiving a BA in geology from Carleton College and an MS in Applied Hydrogeology from Stanford University.

### ABSTRACT:

#### GEOCHEMISTRY OF COASTAL GROUND WATER, SAN DIEGO COUNTY, CALIFORNIA

More than 50 comprehensive ground-water samples were used to gain an improved understanding of the geochemistry of coastal sediment in southern San Diego County. Depth-dependent samples were collected from production wells in the Sweetwater River drainage basin, and from multiple-depth monitoring wells in the San Diego, Sweetwater, and Tijuana River drainage basins. Data shows that the age of ground water increases predictably with depth from an age of about 50 years since recharge for ground water within 100 feet of land surface, to more than 30,000 years for ground water at a depth of about 1,200 feet. Chloride ratios with iodide, boron, and bromide show trends with depth that may indicate ground-water flow paths and (or) layering of sediment. Major ions show some variation with depth and location, but were generally less useful at identifying differences and trends in ground-water chemistry. Samples were collected within an area extending from the international border north to Interstate 8, and from the coastline east to Interstate 15/805. Depth of samples extends from about 150 to about 1,500 feet below land surface.

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### ANNOUNCEMENTS:

#### 2005 SDAG MEETING SCHEDULE - Mark your Calendars!

We'll fill out the schedule as we get speaker confirmations and finalize meeting places. Meetings are usually on the 3<sup>rd</sup> Wednesday of the month but may change to accommodate speaker and meeting place schedules. Check here for updates!

October 22-23	Annual Field Trip—Trains, Veins, and Oikocrysts, southeastern San Diego County
November 16	Dr. Keith Meldahl – "History and Geology along the Gold Rush Trail."
December 21?	Annual Holiday Meeting at San Diego Natural History Museum!

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**AEG's new San Diego chapter** is being lead by Jonathan Goodmacher. He asks AEG members for input to make this chapter successful.

1. *Place of Residence*
2. *General Topics of interest (i.e. groundwater, faulting, regulatory information).*
3. *Suggestions for a social event (e.g. BBQ, bike rides, etc.).*
4. *Preferred meeting schedule (monthly or bi-monthly)*
5. *Preferred meeting venue (office, restaurant, etc.). Suggestions on restaurant are accepted.*
6. *Circle preferred meeting time (BREAKFAST                      LUNCH                      DINNER )*
7. *Suggestions for committees (e.g Student Outreach, Speakers, etc.).*

Please send your comments to:  
Jonathan Goodmacher, PG, CEG

Ninyo & Moore  
5710 Ruffin Road

San Diego, California 92123

Phone: 858.576.1000x1227 Facsimile: 858.576.9600 email: [jgoodmacher@ninyoandmoore.com](mailto:jgoodmacher@ninyoandmoore.com)

## ANNOUNCING THE SDAG 2005 ANNUAL FIELD TRIP!!



### TRAINS, VEINS & OIKOCRYSTS: Backcountry Geology and Byway Lore of southeastern San Diego County, California October 22<sup>nd</sup> - 23<sup>rd</sup>

The geology and history along old U.S. Highway 80 and San Diego and Arizona Railway will be the subject for our 2005 field trip. We will be taken on a 1½-hour rail tour from the Campo Railroad Museum, to look at the center of the La Posta pluton, and hear more about the geology and history of the railroad. We will examine the transition between the eastern and western zones of the Peninsular Ranges batholith, consider the zonation and structure of the world-famous La Posta pluton, and learn about the uses of feldspar from San Diego County's mines. Groundwater challenges in the San Diego backcountry will be looked at, as will the Jacumba volcanics. At the Desert View Tower, we'll have a panoramic view of the Salton Trough and southern Anza Borrego Desert State Park, along with the various routes taken by highways and byways going back to the 1850's. In the Dos Cabezas area, we'll look at the marble quarry, Indian Hill pluton, and traces of Native American culture.

SDAG members will camp or lodge at Jacumba Hot Springs and Cabaña Club, and we will visit several points of interest: geologic, mining and cultural. The trip will be limited to 75 individuals, and carpooling is a must to keep things moving smoothly. Field trip stops have been finalized - contact Phil Farquharson ([sdag@cox.net](mailto:sdag@cox.net)) for more information. We will make every effort this year to have the field guides printed and available the day of the trip.

# SDAG Field Trip 2005:

## TRAINS, VEINS, AND OIKOCRYSTS: Backcountry Geology and Byway Lore of southeastern San Diego County, Calif.

The 2005 San Diego Association of Geologists annual field trip and associated volume theme, will be ***TRAINS, VEINS, AND OIKOCRYSTS: Backcountry Geology and Byway Lore of southeastern San Diego County, California***. We will explore the myriad facets of Old Highway 80, the SD&AE railroad, hot springs, with emphasis on the eastern peninsular range batholith. The Field Trip chair and editor of the guidebook is Phil Farquharson, Vice President of SDAG.

**DATES / ITINERARY:** October 22 - 23, 2005.

Saturday – Meet at Sunrise Highway 1.8 miles north of I-8 at 7:30am. Saturday lunch on the train!  
 Saturday night – Jacumba Hot Springs Spa and Resort. Overnight options include hotel room, tent camping, or RV camping. Catered dinner. Hotel rooms limited to 20 rooms. We've blocked 10 rooms. Call (619) 766-4333 to reserve a room. Use code SDAG for a 10 percent discount. Sunday – Full breakfast, Dos Cabezas box lunch, and departure. Please arrange carpooling. Parking at some stops is extremely tight!

**COST:** \$105 per person – camping. \$90.00 - no camping option. Sorry, no student discount rates. Fee includes guidebook, campground fee, Saturday snack breakfast, cold lunch, dinner, and continental breakfast and box lunch Sunday. Fees are non-refundable. All ages welcome.

**FOR ADDITIONAL INFO:** Contact Phil Farquharson, SDAG Vice President (619) 224-8463.

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**2005 SDAG FIELD TRIP REGISTRATION FORM** **TODAY'S DATE:** \_\_\_\_\_, 2005

NAME(S): \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY/STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 DAY PHONE: \_\_\_\_\_ EVENING PHONE: \_\_\_\_\_

E-MAIL ADDRESS (to be used for field trip purposes only): \_\_\_\_\_

TOTAL NUMBER AND FEE FOR YOUR PARTY (VEHICLE)

Camping option fee @\$ 105/ea. X \_\_\_\_ participants: \$ .  
 No-Camping option @\$ 90/ea. X \_\_\_\_ participants: \$ .

**TOTAL ENCLOSED:** \$ \_\_\_\_\_

MAIL THIS FORM AND YOUR CHECK (payable to SDAG) TO:  
 Phil Farquharson  
 3547 Lowell Street  
 San Diego, CA 92106

**We require that you sign and return the following Release and Waiver before the field trip.**

### San Diego Association of Geologists General Release and Save Harmless Waiver

The undersigned, having been advised as to the nature and possible dangers and hazards of the San Diego Association of Geologists field trip activities planned for October 22 and 23, 2005, does hereby assume any and all risks involved in connection with the field trip and does hereby save and hold harmless the San Diego Association of Geologists, the Association officers and members, all claims, losses and damages (including attorneys fees and any costs involved because of said claims) on account of injury, death, property damage, and inconvenience or loss of money due to delay that may arise, by reason of my participation in the field trip. I understand that my use of alcohol or drugs would impair my judgment and coordination, and will hold the Association harmless from claims arising from the use of either. I understand that I am responsible for carrying my own medical and liability insurance.

Signature \_\_\_\_\_

Date \_\_\_\_\_

**ANNOUNCEMENTS (CONTINUED):**

**The Anza-Borrego Institute**

*in partnership with California State Parks presents,*

**Fossil Treasures of the Anza-Borrego Desert:**

***A Symposium Exploring North America's Richest Continuous Fossil Record for the Last Seven Million Years***

**November 19 & 20, 2005**

**Road Runner Club, 1010 Palm Canyon Drive,  
Borrego Springs, California**

Audience: Paleontologists, geologists, teachers, students, park volunteers and the general public

When you think of Anza-Borrego Desert State Park®, you may envision wildflowers, bighorn sheep, or sandy lowlands framed by rugged mountains. Few realize that the vast expanse of Anza-Borrego's eroded badlands provides the most continuous history of life for the last seven million years in North America. It is indeed one of the richest, most varied fossil records in the western hemisphere. In fact, with this exceptional resource, the environmental changes associated with the long geological record of this area are probably better tracked by fossils from Anza-Borrego than any other fossil deposits in the North American continent. These yield clues to the beginnings of the Ice Ages and the origin and development of modern southwestern desert landscapes.

For the last four years, scientists and researchers have collaborated on the first soon-to-be-published book focusing on the fossil history of this unique land. To celebrate the completion of this major work, we have invited leading specialists and scientists to present their theories and discoveries to the general public during this two-day symposium in Borrego Springs. On Saturday, you will hear about some of the over 550 types of fossils, plants and animals varying from microscopic pollen and algal spores to walrus bones, mammoth skeletons, and giant ground sloth skins that have been recovered. On Sunday, participants will get a first hand look at the fossils and geologic history in the field during guided trips into the desert.

This symposium will serve as an introduction to a series of field programs over the next year on the fossil history of this region. Come explore this region's long vanished past during this unique learning opportunity.

**REGISTRATION:**

**YOU MAY REGISTER BY PHONE, ON-LINE AT WWW.THEABF.ORG OR BY FAXING OR MAILING THE COMPLETED REGISTRATION FORM BELOW. PLEASE REGISTER EARLY, BUT NO LATER THAN NOVEMBER 5, 2005 AS THE FACILITIES ARE LIMITED IN SIZE.**

**COST:**

\$125 - ABF Members; \$150 Non-Members - Attendance to all Saturday lectures, Sunday field trip, program materials, lunch and refreshments both days

\$95 - ABF Members; \$110 Non-Members - Attendance to Saturday lectures and lunch



## ANNOUNCEMENTS (CONTINUED):

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### 2005 Inland Geological Society Meetings

October 5, Wednesday - Jason Preece, Sr. Engineering Geologist, ENGEO Inc., San Ramon, CA, President, California Council of Geoscience Organizations (CCGO): 'Update on California Professional Practice issues and the Professional Geologist in California: Insight on the type and quantity of professional work Geologists do'

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### ***Update on the Elimination of the California Board for Geology and Geophysicists***

The Geology Board's sunset bill was amended on Friday, September 2, to include the Engineer's Board and to extend both of our boards for two years:

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Subject: CCGO - SB228 update

Date: Thu, 8 Sep 2005 15:14:54 +0000

This bill is now on Governor Schwarzenegger's desk for action. The 30-day clock for his decision begins today! Of course, he could act on it at any time up until (and including) the 30<sup>th</sup> day (October 9).

Here is the link:

[http://www.leginfo.ca.gov/pub/bill/sen/sb\\_0201-0250/sb\\_228\\_bill\\_20050907\\_status.html](http://www.leginfo.ca.gov/pub/bill/sen/sb_0201-0250/sb_228_bill_20050907_status.html)

Regards,

Paul Sweeney  
EO - BGG

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### **Jane Gill-Shaler, PG (NC&CA) CCGO Executive Director**

*CCGO-An Advocate for the Profession in the Public Interest - Since 1997*

Cell 336-687-6144 --- landline 336-883-0170 --- 336-883-4919 fax

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Senator Figueroa, the author of SB 228, asks that stakeholders take action by making their views known on this issue. This is because the Governor is moving ahead with sunseting the geology board.

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**Thank you SDAG Corporate Sponsor Sherry Bloom, Coldwell Banker Real Estate** for use of printer and copy machine to produce this newsletter!

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**DO YOU HAVE AN ANNOUNCEMENT??** Do you have an event, job opening, field trip or other announcement you would like to share with our members?? Just call or email our SDAG Secretary, **David Bloom** at 619-571-3470 OR [secretary@sandiegogeologists.org](mailto:secretary@sandiegogeologists.org).

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**SDAG Wear:** - Monte (Murbach) has a variety of shirts, hats, visors and even a nice vest with the SDAG logo. A small selection is available for purchase at the meetings; all SDAG wear can be ordered from Monte.

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## JOB OPENINGS!

**Hargis + Associates, Inc.**, a San Diego based consulting firm specializing in hydrogeology and engineering, currently has opportunities in our San Diego, California office. We are presently looking to fill the following positions:

Staff Engineer: Candidate would have a B.S. Degree in Chemical, Civil, or Mechanical Engineering, EIT Certification and/or a Masters Degree is a plus. Only entry level candidates will be considered. Candidate should possess strong writing and presentation skills. Position will be based in San Diego, California, and will require some travel and field work. OSHA 40-hour training preferred, but not mandatory.

Staff Hydrogeologist: Candidate would have a B.S. Degree in Geology, and 2 to 4 years relevant experience, including experience with soils and groundwater sampling, well installation, work plan and report preparation. Candidate should possess strong organizational, writing, and field investigation and sampling skills. Ability to obtain Professional Geologist (PG) registration within two years or a Masters degree is a plus. Position will be based in San Diego, and will require travel and field work. OSHA 40-hour training required.

Project Hydrogeologist: Candidate would have a B.S. Degree in Geology, and 5 to 7 years relevant experience, including experience with sampling, well installation, work plan and report preparation, project management, cost estimating and scheduling. California Professional Geologist (PG), or ability to obtain within one year preferred. Masters degree or computer groundwater modeling experience is a plus. Candidate should possess strong organizational, writing and presentation skills. Position will be based in San Diego, and will require some travel and field work. OSHA 40-hour training required.

Hargis + Associates offer competitive salaries and benefits, and a challenging work atmosphere. Hargis + Associates in an Equal Opportunity Employer. To learn more about Hargis + Associates, please visit our website at: [www.hargis.com](http://www.hargis.com).

No phone calls please. Qualified candidates should send resumes, along with a cover letter summarizing experience and salary requirements to:

Hargis + Associates, Inc.  
Attention: Phil Rosenberg  
2365 Northside Drive, Suite C-100, San Diego, CA 92108

## 2005 CORPORATE SPONSORS - THANK YOU!!

Corporate sponsors provide a significant portion of SDAG's operating and scholarship budget. In addition to monthly recognition for your contribution, you are entitled to a free Internet "link" from [SDAG's Website](#). We also list Corporate Sponsors in our annual SDAG Field Trip Volume.

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**San Diego Association of Geologists  
c/o David M. Bloom  
3728 Mt. Almagosa Place  
San Diego, CA 92111**