



APRIL 2003

# Los Angeles Basin Geological Society Newsletter

**At Our April Meeting: Thursday, April 24, 2003**

## **Jose Borrero, Will Speak on Tsunami Potential and Risk Along the Southern California Coast**

### **Speaker Synopsis / Abstract**

Jose Borrero was born in Fairfield California and currently resides in Redondo Beach, California. He received an undergraduate degree in Journalism and Telecommunications from the University of Florida in 1992. However, he decided to pursue a more stable career and earned a BS (1995) and MS (1997) in Civil Engineering from the University of Southern California (USC), specializing in ocean and coastal beach processes, long wave modeling and tsunami run-up. Jose is currently pursuing a PhD at USC focusing on the same area of specialization. Jose's favorite extracurricular activity is surfing and waiting for those big waves he has dedicated the last 10 years of his life studying.

The densely populated coast of Southern California has been affected by tsunamis several times in the historical past. The hazard associated with near shore tsunamis has received much less attention than that associated with trans-oceanic events. A review of the offshore geology as well as Southern California's tsunami history shows that the conditions exist for tsunami generation in the Southern California Borderlands. Modeling results suggest that damaging tsunamis can be generated by thrust and reverse faults in the Santa Barbara Channel and Santa Monica Bay. Similar results are computed for waves generated by earthquakes near restraining bends on strike slip faults that parallel the extreme southern California coast. In contrast, the waves generated by underwater landslides, such as the event that caused the devastating tsunami in Papua New Guinea, are modeled to be capable of producing narrowly focused regions of extreme run-up ranging from 2 to 20 m depending on the characteristics of the landslide. Waves generated from earthquakes or landslides in the

Borderlands region would impact the California coast within minutes, leaving essentially no time for warning or evacuation. Several scenarios highlighting the differences in tsunami sources and the potential impacts will be presented.

Contact Jose Borrero through email at [jborrero@usc.edu](mailto:jborrero@usc.edu)

### **Time, Place, And Cost**

#### **Time:**

**Thursday, April 24, 2003**

#### **Meeting Agenda**

**Lunch Served: 11:30 AM to 12:00PM**

**Announcements: 11:50 AM to 12:05 PM**

**Guest Speaker: 12:05 PM to 12:45 PM**

#### **Place:**

**The Grand at Willow Street Conference Center** located at 4101 East Willow Street, Long Beach, CA. (562-426-0555). Take Lakewood Boulevard south from the San Diego Freeway (405), turn west onto Willow Street and turn right onto Grand Avenue at the sign for the Center. Park free in the garage structure.

#### **Cost:**

Lunch and Speaker: **\$17.00 with reservations**

**\$20.00 without reservations**

Student: **\$ 6.00 (Lunch and Speaker)**

#### **Reservations:**

Make your reservations using our web site at [www.labgs.org](http://www.labgs.org) by emailing [iaburto@breitburn.com](mailto:iaburto@breitburn.com) or phoning Ivan Aburto at (213) 225-5900. **Reservations must be made prior to Tuesday** before the meeting.

## Luncheon Meeting Student Bonus

The first five (5) students to show up for the luncheon meeting will have their meal costs paid for courtesy of Mike Mills and Pacific Soils Engineering. In addition, all students attending the LABGS meeting will receive a free SEPM publication courtesy of the Pacific Section SEPM.

## LABGS Future Meetings

Lunch meetings are held at *The Grand at Willow Street Conference Center*. Lunch starts at 11:30 AM

### 2003 Winter / Spring Schedule

**May 22, 2003**

**PSAAPG / WRSPE Convention - Long Beach Hilton, with 3 days of technical sessions, plus field trips and short courses.**

**June 26, 2003**

**TBA**

**July & August**

**No Meetings – Summer Field Season**

## Announcements / Information

### Teacher of the Year Award - Winner

As part of our mission to support youth education activities, the Los Angeles Basin Geological Society in cooperation with PSAAPG is proud to announce **Mike Phillipow**, as our **2003 award winner of Excellence in the Teaching of Natural Resources in the Earth Sciences**. Mike is a science teacher for 11<sup>th</sup> and 12<sup>th</sup> grades at Long Beach Polytechnic High School.

Mike teaches geology classes as an upper division science elective. This class is open to all students attending Long Beach Poly. The goal of his course is to introduce geology to the students and provide an appreciation for the earth and its resources. Mike will receive \$250 to use in the school's science program or attend science conferences / training seminars. In addition, Mike will be the LABGS entry into the PSAAPG Teacher of the Year 2003 award.

Thanks to Karla Tucker for heading this most important committee.

## Vote, Vote, Vote! AAPG House of Delegates Election

Three of our four *House of Delegates* to AAPG will be open starting in July 2003. These positions are 3-year terms lasting until June 2006. We have three candidates running for the three delegate positions are **Karen Blake** of Paulsson Geophysical, **Don Clarke** of The City of Long Beach, Oil Properties, and **Dalton Lockman** of Plains E & P. On the last page of this newsletter before the membership form, you will find an election ballot. If you are an active member of the AAPG and whose dues are paid in full, you may vote. Please fill out the ballot and mail it back to the address on the ballot, or better yet, bring it to the April meeting and vote in person. These are vital positions to the leadership for the AAPG, and the future of the LABGS. The delegates represent the LABGS and the Pacific Section for AAPG policy making.

### 2003 Student Recognition Awards

The Los Angeles Basin Geological Society is pleased to offer two scholarship awards as a form of encouragement and recognition to those College students who show dedication and passion to the field of Geoscience. It is our goal to help future geoscientists on in their pursuits. Both of these awards consist of a Brunton Compass and a wall certificate.

### The Don Clarke Brunton Award

The Don Clarke Brunton Award is given to a qualified student graduating from an LA Basin Community College with an Associate Degree, enrolled in a Geology or Earth Science curriculum with plans to pursue a baccalaureate degree in Geology or the Earth Sciences.

#### AWARD QUALIFICATIONS

To qualify for this LABGS award, the student must meet the following criteria:

1. Plan to graduate in 2003 with an Associate Degree from a Los Angeles Basin Area Community College.

2. Complete a Geology or Earth Science curriculum.
3. Must be pursuing plans to enroll in a four-year college or university with Geology, Geological Sciences, or Earth Science as their designated major.

## **The LABGS Brunton Award**

The LABGS Brunton Award is given to a qualified undergraduate student attending a four-year LA Basin College or University currently pursuing a baccalaureate degree in Geology or the Earth Sciences.

### **AWARD QUALIFICATIONS**

To qualify for this LABGS award, the student must meet the following criteria:

1. Be enrolled as an undergraduate at a college or university in the LA Basin
2. Have declared majoring Geology, Geological Sciences or Earth Sciences

### **REQUIREMENTS FOR NOMINATION ARE THE SAME FOR BOTH AWARDS.**

**Nominees for these awards are submitted by a faculty member of the nominee's LA Basin College or University. The faculty member must:**

1. Fill out and sign the LABGS Award Form.
2. Submit the required documentation by the due date of May 23, 2003

### **SELECTION PROCESS**

The elected officers of the LABGS will select the most qualified candidates based on the following criteria:

1. Grade point average in earth science classes.
2. An enthusiastic or special recommendation from the college advisor, department chair, or mentor professor

### **NOTIFICATION OF AWARD**

All Applicants will be notified once selection process has ended. Notification will be done via mail. The Award will

be presented at the LABGS luncheon meeting on June 26, 2003. The winner will be invited to attend the luncheon

**To find out more information on these recognition award or get an application. Go to our website at [www.labgs.org](http://www.labgs.org)**

## **The LABGS.org Web Site Up and Running!**

The LABGS is finally moving into the digital era. On November 21, 2002, we retired our rock tablet chisels and ignited our web site. This web site may be accessed at [www.labgs.org](http://www.labgs.org). It will be a great place to keep informed over what is going on in the LABGS. The web site will not replace our newsletter but will provide a place to retrieve past issues. As all web sites we will continually change it to meet the needs of our members and friends. If you haven't done so already, you will discover that you can access our newsletter, make reservations for the lunch meeting, contact an LABGS officer, or learn about LA Basin Geology by touring the LA Basin Geology 101 tab.



**The 2003 Combined PS-AAPG / SEPM / SEG and WR-SPE is just around the corner – May 19 - 24.**

The Convention committee is extending a sincere invitation to you to actively participate in the 2003 Combined Meeting of the **Pacific Section of the American Association of Petroleum Geologists (including SEPM and SEG)** and the **Western Region of the Society of Petroleum Engineers** in Long Beach, California, May 19 to May 24. This event is the third time the WR-SPE and PS-AAPG have combined forces to provide a multidisciplinary forum for the exchange of engineering and geoscience technologies and best practices. It is our hope that this meeting will be a time to rejuvenate your thinking

about petroleum engineering and the geosciences, renew acquaintances, honor your profession and its special members, and get excited about the future of our industry.

The Long Beach Hilton Hotel provides the perfect site for the meeting, keeping technical sessions, exhibits and special events all under one roof. The goal of the convention committee is to optimize the time available to provide a maximum amount of information, education, and excitement, at a reasonable price. Your pre-registration fee will include several events that you won't want to miss, a seat at the All Convention Luncheon, your choice of tickets to the WR-SPE Award Luncheon or the PS-AAPG Award Reception, admission to the Wednesday Night Icebreaker and Friday Exhibit Hall Lunch.

Our convention theme - *LA Basin: Original Oil Field Legend* highlights the heart of several planned technical sessions, which will disseminate information that can be applied to the entire pacific section and western region - parallel development of subsurface and surface resources in difficult environments.

**The Technical Program and Education Committees have compiled a strong blend of presentations, poster sessions, panel discussions, short courses and field trips covering a broad range of topics. The meeting will kick off with a wide variety of excellent field trips and timely short courses followed by three full days of technical sessions, which includes over 160 technical papers, and a day dedicated to Independent oil producers, officiated by the PTTC.**

The meeting announcement will be mailed the first week of March so look for it in the mail. After March 1<sup>st</sup>, you will also be able to get all the convention information on convention web site at [www.psaapg.org/convent.html](http://www.psaapg.org/convent.html). Make your plans now and return the registration form today.

**During the upcoming PSAPG / WR/SPE Convention the LABGS will be sponsoring 2 field local field trips.**

**Please note: You may attend these trips even if you're not planning to attend the convention. Send in**

convention registration form with just the field trip information and payment.

### **Trip # 1**

#### **Channelized Turbidite Systems of the Miocene Capistrano Formation, California**

**Leaders:** Tor Nilsen, Consultant & Hilario Comancho, Signal Hill Petroleum Co.

**Cost:** \$100.00 - includes bus transportation, snacks, lunch and study guide materials.

**Description:** The one-day field trip to the cities of Dana Point and San Clemente will examine outcrop exposures of channelized turbidite systems within the Miocene Capistrano Formation. In the morning we will examine the deep-water deposits of the Doheny Channel, excellently exposed along the cliffs at Dana Point. We will eat lunch (provided) at San Clemente State Beach, where we will examine the superbly exposed Miocene turbidite system along the beach cliffs. The turbidite system at San Clemente has been interpreted to represent the fill of a single, vertically aggrading turbidite channel.

### **Trip #2**

#### **Oil Is Where You Find It: The History of Oil Along the Newport-Inglewood Fault Trend**

**Leaders:** Don Clarke, Long Beach Department of Oil Properties, John Jepson, California Division of Oil, Gas and Geothermal Resources, James Slosson, Slosson & Associates, Mel Wright, Consultant, Ed Steiner, Leighton and Associates, Bob Lemmon, Leighton and Associates, Eldon Gath, Earth Consultants International, Dalton Lockman, Plains Exploration and Production Co., Glenn Swanson, Signal Hill Petroleum, Jon Kuespert, Breitburn Energy, and Roy Shlemon, Consultant.

**Cost:** \$100 - includes bus transportation, snacks, lunch and study guide materials.

**Description:** This field trip will visit the oil fields along the famous Newport-Inglewood Fault trend. The trip starts with a visit to Hoag Hospital where natural gas seeps are tapped for the hospital. Up the coast at the giant Huntington Beach oil field recent urban development rapidly covers the old oil operations. A careful eye can spot the precautionary measures in place. The Long Beach Oil field is probably the most prolific oil spot on earth. Here we will examine the Newport-Inglewood Fault and see how urban development co-exists with 82-year old oil activities. The trip continues north through the Dominguez

oil field to the Inglewood oil field. At this site occurred the famous Baldwin Hills dam disaster. The trip continues north to visit BreitBurn's new Pico drill site. This trip will provide a geologic overview of the fields along the Newport-Inglewood trend as well as an overview of the petroleum industry today in the Los Angeles Basin. The agenda includes discussions on the environment, politics, energy, history and the future.

## **A 3<sup>rd</sup> Trip sponsored by the Dibblee Center is also planned that you won't want to miss**

### **A Day in the Field With Tom Dibblee: Late Cenozoic Magmatism, Faulting, Uplift, Flooding, and Erosion in the Eastern San Gabriel Mountains and Pomona Valley**

**Leaders:** Jon Nourse (Cal Poly Pomona), and Tom Dibblee

**Fee:** \$150.00- Includes bus transportation, morning coffee and doughnuts, lunch, ski lift ticket, field trip guidebook, and a copy of Tom Dibblee's newly released geologic map of the Mt. Baldy quadrangle. Proceeds from this fund-raiser will be utilized exclusively for efforts towards the continued publication of Tom Dibblee's extensive geologic mapping of California.

**Description:** This trip will explore spectacular outcrops that record the dynamic geologic development of the eastern San Gabriel Mountains and Pomona Valley. Precipitous canyon vistas and classic geomorphic features will underscore the hydrologic and erosional processes that have sculpted these mountains during Quaternary exhumation of plutonic and metamorphic basement. The field trip begins at Puddingstone Reservoir, where a section composed of Miocene Glendora Volcanics overlain by Puente Formation preserves the near-surface conditions that prevailed adjacent to the San Gabriel block prior to its northwestward translation along the San Andreas Fault. Several stops along the Mt. Baldy Road will convince even the most skeptical observer that the rate of fault-induced uplift is exceeding the rate of erosion, although erosion is certainly not negligible! Participants will view stranded stream terraces, damage resulting from the flood of 1969, pristine exposures of the left-lateral San Antonio Canyon fault, and two generations of dikes that correlate with

volcanic rocks near Puddingstone reservoir. Following a BBQ lunch catered by Halliburton amongst the pines in Mt. Baldy Village, we will ride the ski lift to the drainage divide at Mt Baldy Notch (elevation 7800 ft). Here, exposures of Pelona Schist (once part of a Mesozoic ocean basin) await us along with hot cocoa and views down San Antonio Canyon and north into the Mojave Desert.

## **The Technical Program Summary**

The table on last page of this newsletter summarizes the planned technical session for the convention. **This is an updated version of the previous one posted last month.** Check it out to wet your appetite. **The program contains over 116 geoscience 50 engineering papers.** If you have any questions or comments, call John Cooper, the technical program chair 714- 278-2662 / [jcooper@fullerton.edu](mailto:jcooper@fullerton.edu)

## **Contact Us – The LABGS board**

President: Dalton Lockman (323) 298-2242

[dlockman@plainsxp.com](mailto:dlockman@plainsxp.com)

Vice President: Mike Mills (714) 220-9138, ext. 13

[millslabgs@hotmail.com](mailto:millslabgs@hotmail.com)

Treasurer: Kristi Darby (213) 225-5900

[kdarby@breitburn.com](mailto:kdarby@breitburn.com)

Secretary: Ivan Aburto (213) 225-5900

[iaburto@breitburn.com](mailto:iaburto@breitburn.com)

## **Your Name Here!**

***Advertising in this newsletter is now available! Advertising rates for a business card size add are \$60.00 for six issues. These fees help offset our publishing costs. If interested, please contact Dalton Lockman***

# **AAPG House of Delegate (HOD) BALLOT**

**For the HOD term 2003 - 2006**

**Karen Blake**

**For the HOD term 2003 - 2006**

**Don Clarke**

**For the HOD term 2003 - 2006**

**Dalton Lockman**

**Mail to Ivan Aburto or bring to the ballot box at the April LABGS meeting**

**Ivan Aburto  
BreitBurn Energy Company, LLC  
515 South Flower Street, Suite 4800  
Los Angeles, CA 90071.**



# Los Angeles Basin Geological Society Membership Form

**Join the LABGS and become a member of the Pacific Section AAPG all for one low price of \$12.00 per year - 2 West Coast Geoscience Organizations for the price of one**



### Membership Benefits

- LABGS Membership
- Monthly Luncheon Meetings with Strong Technical Programs
- Pacific Section AAPG Membership
- Pacific Section AAPG Bi-Monthly Newsletter
- Discounts for PSAAPG Bookstore Publications
- Bi-Annual West Coast Geoscience Directory - *next edition 6/03*
- Networking and Social Opportunities with Fellow Geoscientists

#### Current Annual LABGS/PSAAPG Dues

1 Year Option = \$12.00                      \$ \_\_\_\_\_  
 3 Year Option = \$36.00                     \$ \_\_\_\_\_

#### Extended E-Mail Announcement List Fees

To receive meeting notices from SJGS and CGS  
 1 Year Option = \$12.00                      \$ \_\_\_\_\_  
 3 Year Option = \$36.00                     \$ \_\_\_\_\_

#### PSAAPG Foundation Contributions

B. Hacker Publication Fund                \$ \_\_\_\_\_  
 Martin Van Couvering Fund                \$ \_\_\_\_\_  
 Dibble Map Foundation                     \$ \_\_\_\_\_  
 California Well Sample Repository        \$ \_\_\_\_\_  
 John Kilkenny Scholarship Fund            \$ \_\_\_\_\_  
 PSAAPG Foundation Trust Fund             \$ \_\_\_\_\_

#### TOTAL PAYMENT

Total Amount Enclosed                    \$ \_\_\_\_\_

#### Essential Member Information

Last Name                                      \_\_\_\_\_  
 First Name                                      \_\_\_\_\_  
 Middle Initial                                   \_\_\_\_\_  
 E-Mail Address                                \_\_\_\_\_  
 Mail Address                                    \_\_\_\_\_  
 Res or Bus ?                                    \_\_\_\_\_  
 \_\_\_\_\_

#### Additional Directory Information

Employer                                        \_\_\_\_\_  
 Position / Title                                \_\_\_\_\_  
 Bus Phone #                                    \_\_\_\_\_  
 Res Phone #                                    \_\_\_\_\_  
 Fax Phone #                                    \_\_\_\_\_  
 Spouse's Name                                \_\_\_\_\_  
 Education                                      *Highest Degree*                                      *Year*  
 School    \_\_\_\_\_

**Signature** \_\_\_\_\_

*Annual membership is handled through PSAAPG and runs from July 1, through June 30. If you are already a current member of PSAAPG and you selected LABGS affiliation you are already a member of the LABGS.*

**Please Make Checks out to PSAAPG and mail along with member form to:  
 PSAAPG P.O. Box 1072, Bakersfield, CA 93302**