September 2006



## Los Angeles Basin Geological Society Newsletter

September 28 Meeting: Dr. Mike Clark Consultant, and AAPG Levorsen Award Recipient for this talk Will speak on

## Using Sequence Stratigraphy to Characterize and Manage a Mature Diatomite Reservoir at Lost Hills Field, California

## **Speaker Synopsis / Abstract**

Even though Lost Hills field in the San Joaquin basin of California has produced more than 300 MMBL of oil since 1913, at least 100 MMBL remains to be recovered from lowpermeability (<1 md) Upper Miocene diatomites at shallow burial depths (<2,500 ft). A better understanding of these rocks by applying new technologies and concepts is essential to efficiently manage this aging field. Sequence stratigraphy, which emphasizes the time relationships of stratigraphic units, has proven particularly important for understanding the architecture of this reservoir, and maintaining production.

Although integrating sequence stratigraphy into a 3-D reservoir model facilitates characterizing flow units, and the distribution of diatomite rock types and reservoir properties, challenges remain – in particular a combination of tight rocks, soft reservoir, and high compaction that make diatomites the bane of many petroleum engineers. Nonetheless, the low cost of exploiting a shallow reservoir with high reserves make the Lost Hills play attractive. Clearly, understanding the impact of reservoir architecture on fluid flow, fracture stimulation, and subsidence is essential to maximizing value from this mature asset.

Mike Clark is a consulting petroleum geologist based in Bakersfield, CA. Currently, he is involved in the planning and geosteering of horizontal wells exploiting turbidite reservoirs in Long Beach Harbor, but previously he has worked for Amoco, Exxon Research, Elf Aquitaine Research, ARCO, and Chevron in a variety of domestic and overseas assignments. He has B.S. and M.S. degrees from the University of California, and a Ph.D. from the Colorado School of Mines. His interests include sequence stratigraphy, sedimentology, and organic geochemistry, and he has published over 50 abstracts and articles. He has also been awarded both the Levorsen Best Paper and Vic Church Best Poster Awards for papers presented at conventions of the Pacific Section of AAPG.

Mike is active in several professional and community organizations. He is a California Registered Geologist, and an AAPG Certified Petroleum Geologist. He is past President of the San Joaquin Geological Society, and past Vice President of the Pacific Section of AAPG, from whom he recently received their Distinguished Service Award. He has been active in the Boy Scouts for over 20 years, having been an Eagle Scout and receiving the Silver Beaver Award for service to scouting. He is also an experienced rock climber and mountaineer, with multi-day ascents of Half Dome and El Capitan in Yosemite Valley, and he has reached the summit of 69 U.S. peaks with elevations over 14,000 feet.

## Meeting Time, Place, Cost and **Reservations**

#### Time: Thursday, September 28, 2006

#### **Typical Meeting Agenda**

Lunch Served: 11:30 AM to 12:00PM Announcements: 11:50 AM to 12:15 PM Guest Speaker: 12:15 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:

Student:

Lunch and Speaker: \$20.00 with reservations **\$25.00** without reservations \$ 5.00 (Lunch and Speaker)

## **Meeting Reservations:**

Make your reservations using our web site at www.labgs.org, emailing iaburto@breitburn.com or calling Ivan Aburto at (213) 225-5900 ext. 234. Reservations must be made prior to Tuesday before the meeting, but walk-ons are always welcome

## **Upcoming 2006 Speaker Schedule**

September 28, 2006 – The speaker will be Dr. Mike Clark – Consultant speaking on "Using Sequence Stratigraphy to Characterize and Manage a Mature Diatomite Reservoir at Lost Hills Field, California".

October 26, 2006 - The speaker will be Dr. Robert Mellors of SDSU speaking on "Tectonics of the Imperial Valley".

November 16, 2006 (note the date change because of Thanksgiving) – The speaker will be **Dr. Kevin Grazier** of JPL - Pasadena speaking on "The Cassini/Huygens Mission to Saturn and Titan".

No December meeting - Happy Holidays!

If you have a speaker suggestion, please mention it to a Board member !!

# WE'LL BE THERE



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## LABGS and the 2007 AAPG **Convention field trips**

The LABGS has offered to lead four field trips in conjunction with the national meeting. If you have an interest and experience in field trips in the SoCal area please contact an officer to inquire about our needs. We are working on day-trips to these areas:

> **Catalina Island Geology** The Santa Monica Mts Geology **Palos Verde Peninsula Geology** Los Angeles Urban Oil Fields

#### DAVID B. DEL MAR

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#### **Announcements / Information**

### **House of Delegates**

The Los Angeles Basin Geological Society as a part of the National AAPG organization has voted on three delegate spots for the National AAPG House of Delegates. The selected individuals are:

> Don Clarke Jon Kuespert Reinhard Suchsland

#### 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. The 2006 recipient was Ms. Kathleen Nugal, a student at CSU-Dominguez Hills. Ms. Nugal's award ceremony was held at the June monthly meeting.

The Society is currently looking for qualified applicants for the 2007 award.

#### SELECTION PROCESS

The above award winner was selected from candidates nominated by a faculty member. The winner was selected based on the following criteria:

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

#### The Don Clarke 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.

The Society is currently looking for qualified applicants for the 2007 award.

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

- Plan to graduate in 2006 with an Associate Degree from a Los Angeles Basin Area Community College.
- Complete a Geology or Earth Science curriculum.
- Must be pursuing plans to enroll in a fouryear college or university with Geology, Geological Sciences, or Earth Science as their designated major.

## **Dibblee Foundation Matching**

The LABGS will match all member contributions to the Dibblee Foundation up to a total of \$1,000 from the Society. To be eligible the donation must be sent to the LABGS before October, 2006. The LABGS will forward the donation on to the Foundation and match the dollar amount. Please send the check payable to the "Dibblee Foundation" to Jon Kuespert, c/o BreitBurn Energy Company LLC, 515 South Flower Street, Suite 4800, Los Angeles, CA 90071.

#### **Fall Field Trip**

We are working on a fall field trip for Jan - Feb of next year to the Laguna Beach area when the seasons change. We hope that you can join us. More information will be forthcoming in the Fall newsletters.

Your Name Here! Advertising in newsletters is available! Advertising rates for a business card size ad is \$90 for one year (9 issues). These fees help offset our publishing costs. If interested please contact a Board member.

## **President's Note**

To all our members,

This has been another great summer and a wonderful time to visit some of the great outcrops in the Los Angeles Geological Society area of interest. Seeing how we have outcrops of volcanics in Hawaii, schists on Catalina, diatomites in the Santa Monica Mts, granites in Palos Verde, conglomerates in San Diego, sandstones in Los Angeles, and beach processes in all those places, we have a virtual plethora of opportunities to hike and see new things within our membership territory. I hope that you got a chance to visit some of them.

This year we have another great lineup of speakers for our monthly meetings. If you haven't been to one lately, please try to make it, have lunch, listen to an interesting talk, see some longtime friends and then make some new ones. Please join us.

Elections are still going on. We encourage everybody to vote. Voting helps your Society maintain a representative sampling of individuals who want the Society to become stronger, will put the time in to do that, and meet your needs. It also indicates a degree of support for the hard work put forth by your officers. **Please show that support!** 

Remember, because of the importance of the Dibblee Foundation, your Society has decided to match your donations to the Foundation (see above for details).

We have new AAPG House of Delegate members (see above for details). Give them support and advice, they have made a long-term commitment to help **YOU**.

We have a fantastic speaker this month (Dr. Mike Clark) to kick-off our 2006-2007 season (see the abstract and his bio above). Please join us for a great talk.

Thanks!

Jon

#### **Contact Us – The LABGS Board**

President: Jon Kuespert (213) 225-5900 jkuespert@breitburn.com

Program Chair: currently vacant

Treasurer: Steve Zigan, (949) 355-4467 szigan@eri-us.com

Secretary: currently vacant

OUR WEB SITE ADDRESS IS: www.labgs.org



## 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		Essential Member Information		
1 Year Option = \$12.00	\$	Last Name		
3 Year Option = \$36.00	\$	First Name		
		Middle Initial		
Extended E-Mail Announceme	nt List Fees	E-Mail Address		
To receive meeting notices from SJGS and CGS		Mail Address		
1 Year Option = $$12.00$	\$	Res or Bus ?		
3 Year Option = \$36.00	\$			
PSAAPG Foundation Cont	ributions	Additio	nal Directory Inf	ormation
B. Hacker Publication Fund	\$	Employer		
Martin Van Couvering Fund	\$	Position / Title		
Dibble Map Foundation	\$	Bus Phone #		
California Well Sample Repository	\$	Res Phone #		
John Kilkenny Scholarship Fund	\$	Fax Phone #		
PSAAPG Foundation Trust Fund	\$	Spouse's Name		
	+			
	·	Education	Highest Degree	Year
TOTAL PAYMENT		Education School	Highest Degree	Year

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