

Los Angeles Basin Geological Society Newsletter

January 25, 2007 Meeting: Nancy Beresky

of Waterstone Environmental, Fullerton, California

Will speak on

Basic Geology Used to Create Approaches Considered "Innovative" in Environmental Remediation

Speaker Synopsis / Abstract

The drop in crude oil prices in the mid 1980's and the concurrent enaction of Federal legislation to clean up hazardous waste sites (CERCLA/SARA or "Superfund") created an exodus of geologists from the (then) sagging oil industry to the many new positions available in the exploding environmental consulting industry. The environmental consulting industry has benefited from the contributions of geologists as "subsurface" scientists whose knowledge of stratigraphy, lithology, and hydrology is essential to effective and complete cleanup strategies. Many project managers in environmental consulting that perform site assessment and remediation are engineers, chemists, environmental scientists, and even toxicologists and physicists. However, the scientist with the geology background appears to have the most complete understanding of the subsurface and the awareness of and use of the myriad sources of data available to study soil and groundwater.

Typically, site assessment and cleanup strategy is based on data complied from analysis of soil samples collected from the site. However, other data sources are available to provide further information that are practically unknown to professionals other than geologists. Original USGS topography maps can clearly delineate historic channels or low areas that are backfilled today and provide more permeable areas for groundwater or product extraction. The ability to recognize the geologic contact between alluvium and bedrock can prevent costly requirements to drill and evaluate bedrock samples. USGS publications are available for many parts of southern California and provide valuable information regarding geology, faults, bedrock, and crude oil distribution. Other tools, borrowed from the oil industry, can be applied to optimize environmental assessment and remediation such as the enhancement of permeability by fracturing and the use of downhole logging and cameras to evaluate monitor well conditions and formations.

Case studies involving these tools as innovative methods are discussed in this presentation. The case studies indicate that an intermediate understanding of geology is crucial to developing site assessment and remediation techniques for environmental cleanup problems that do not fit "textbook" subsurface conditions.

Ms. Nancy Beresky is a Principal Hydrogeologist with Waterstone Environmental, Inc. and is registered in the State of California as a Professional Geologist and in the State of Nevada as a Certified Environmental Manager. She has been employed as a geologist for over 28 years, the last 18 of which have been spent in the environmental industry.

Ms. Beresky has a Bachelor of Science degree from the University of Illinois-Champaign and is the author of various papers on site assessment, remediation, and brownfields redevelopment. Prior to her environmental work, 8 years of Ms. Beresky's experience was spent in the oil industry as a petroleum geologist. She has used her knowledge of the production side of the oil industry to successfully perform remediation for oilfield properties in California. Her expertise is in site assessment, remediation and closure for brownfields projects associated with oil fields and other industrial uses to prepare the land for commercial or residential redevelopment.

Meeting Time, Place, Cost and Reservations

Time:

Thursday, January 25, 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 2007 Speaker Schedule

January 25, 2007 – The speaker will be Nancy Beresky speaking on "Basic Geology Used to Create Approaches Considered "Innovative" in Environmental Remediation".

February 22, 2007 – The speaker will be Dr. Gene Fritsche speaking on "Into the Bowels of Hades: Investigating an Early Miocene Tilted Volcano in the Santa Monica Mountains"

March 22, 2007 – The speaker will be AAPG Distinguished Lecturere Dr. Jacob Lowenstern speaking on "**The Yellowstone Caldera**".

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 is leading/sponsoring four field trips in conjunction with the national meeting. We need help with some of the trip work. If you have an interest and experience in field trips in the SoCal area please contact an officer to inquire about our needs. Please contact us now. We are working on day-trips to these areas:

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

A synopsis of each trip is included below. For more information see the AAPG website www.aapg.org.

Borderland Rift Basement Tectonics and Geology of Santa Catalina Island

Trip #5 Thursday 3/29 1:00 PM – Saturday 3/31 7:00 PM Cost \$395

This trip will visit Santa Catalina Island to examine the outstanding examples of basement rock outcrops exposed on the island, evidence of ancient and active faulting and explore the mot recent tectonic models and earthquake potential for the island. The participant will see landsliding, natural tar seeps, and rock which is the clastic source for many southern California reservoirs.

(continued)

Santa Monica Mt. Outcrops – Deep Production from the Los Angeles Basin

Trip #6 Saturday 3/31 7:30 AM - 9 PM

Cost: \$165

Visit some of the fields and outcrops that have made the Los Angeles Basin one of the world's most prolific basins. Deep marine to shallow marine productive zones crop out in the Santa Monica Mts. The participant will be able to see up close some of the stratigraphy and depositional character of these significant production units.

Urban Oil Fields of the Los Angeles Basin – Geology, History, Oil and Urban Living

Trip #7 Sunday 4/1 7:00 AM – 4:00 PM Cost \$125

This trip visits some of the fields in the Los Angeles Basin that are along the Newport-Inglewood strike-slip and the Las Cienegas thrust fault trends. The journey will treat you to a sampling of the geology, environment, politics, energy, history and the future of the urban oil fields.

Geology of the Palos Verdes Peninsula

Trip #17 Thursday 4/5 7:00 AM – 6:00 PM Cost: \$150

The Palos Verde Peninsula is a favorite location for field trips in the Los Angeles area for the many universities and college professors and their students and there is lots of geology to interested professional geologists as well. This trip will have stops at classic exposures, landslides, beautiful vistas and urban development, all mixed in with Cretaceous to present-day earth forces.

DAVID B. DEL MAR

Consulting Petroleum Geologist
California Registered Geologist #634

Development - Thermal EOR - Property Reviews

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Announcements / Information

Jobs

One group has approached us with employment needs.

The Geology Investigations Unit of the Geotechnical and Materials Engineering Division of the Los Angeles County Department of Public Works has spots for an:

- 1. Engineering Geologist
- 2. Engineering Geologist Assistant

Please contact Greg K. Johnson - Supervising Engineering Geologist at (626) 458-4923, or gjohnson@ladpw.org

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 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 four-year college or university with Geology, Geological Sciences, or Earth Science as their designated major.

Student Sponsorship

Both Halliburton and Schlumberger are defraying the cost to the Society of our students-at-the-monthly meetings program. Thank you.

Fall Field Trip

We are working on a fall field trip for early this year to the Laguna Beach area when the seasons change. We hope that you can join us. More information will be forthcoming in the February newsletter.

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,

Happy New Year! We are starting the year off with some great speakers on very interesting topics.

This month's talk will be by Ms. Nancy Beresky on "Basic Geology Used to Create Approaches Considered 'Innovative' in Environmental Remediation". Ms Beresky has a very interesting background in the environmental and oil industries. Should be a great talk, please attend!

Our hard-rocker segment starts in February with Dr. Gene Fritsche talking on the Santa Monica Mt volcanics, and then Dr. Jacob Lowenstern talking in March about the Yellowstone Caldera. Should be an interesting 1-2 punch and I hope that you can attend both of them.

And the Convention is almost here. This year the National AAPG Convention, is to be held ~April 2-4 in Long Beach, CA <u>our</u> backyard! We need volunteers to help with the field trips and other programs. Please volunteer, it is appreciated.

Thanks!

Jon

Contact Us – The LABGS Board

President: Jon Kuespert (213) 225-5900 <u>ikuespert@breitburn.com</u>

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	ent 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 Conti	ributions	Addition	nal Directory Inf	formatior
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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