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SPE Western Region Society of Engineers and
Pacific Section American Association of Petroleum Geologists
2008 Joint Meeting

Technical Sessions March 31 through April 2, 2008
Bakersfield, California
Message from the President
Jon Kuespert

Hope the Holidays were good to all of you and that this finds you with good memories of families and friends. Here in Southern California we are suffering through another horrendous winter, and I find myself needing a stronger sunscreen.

One of our major annual events is THE CONVENTION. In 2008 the AAPG-SPE-SEPM-SEG Convention will be in Bakersfield from March 31 – April 2. The call-for-papers has gone out and the response from the AAPG side has not yet filled all the technical sessions. The SPE sessions are full. Please submit an abstract to give a talk. These are busy times, we know that you are trying to keep production up, but when business is good there is little time, and when business is bad there may not be the support from our companies. Now is the time to contribute, if you are a first-timer or had a prior talk with great reviews. The audience will be great, the venue superb, and the convention committee is doing a great job lining up other activities. Please support us in this endeavor. Let’s continue the success of the 2008 National Convention in Long Beach. To find out more please go to our website, www.PSAAPG.org.

I want to remind you that we are still working on a PSAAPG education initiative. This is a multi-year project that I hope can help put us bring in more geo-interested youth to fill our ranks in the future. Several programs are put together for that:

The first program is the Imperial Barrel Award competition. This Imperial College of London program was first run in the U.S. at the 2008 National Convention in Long Beach. Graduate-level students from around the world compete with a common oil and gas dataset. The deadline for schools to participate in this event has passed and we are gearing up to find the PSAAPG representative. We have two schools this year, and several more will join in 2009. For more info please see the Imperial Barrel Award website, www.aapg.org/iba, or contact our PSAAPG coordinator, Morgan Sullivan of Chevron, at morgansullivan@chevron.com.

The second program is the Teacher Of The Year award (TOTY). This award honors a teacher who makes an impact on our students, our future. Teachers are the vehicle to connect with our students, we need to win their support. Please contact Sandra Szymanski at Chevron, SandraSzymanski@chevron.com for more info, or with nominations.

The third program is related to our involvement in other areas. We have formed a PSAAPG committee to look into options that will provide us both an immediate and a long-term impact. Kurt Neher of Occidental, kurt_neher@oxy.com, are Karen Blake of PXP, kblake@pxp.com, are helping to lead this charge. We are not sure what we will do yet but want to get as many people as possible to be positively impacted. As this is a 2+ year effort it may take some time to get going. Ideas and volunteers are still appreciated.

We also are still looking for talks for our library. These canned talks could be used by our various societies to fill in for missing speakers, and can also serve as educational outlines for novice speakers. If you would be willing to contribute a canned talk to this effort, preferably in PowerPoint, please speak with me or another officer.

Thanks, and have a wonderful winter!

Jon
LONG BEACH SUBSIDENCE HISTORY

East Wilmington Oil Field (Fault Blocks)

By the 1940’s, it had been determined that the Wilmington Oil Field extended further eastward and offshore to Seal Beach from the already developed Harbor area. As California State Offshore Leases were being developed up and down the coastline in the 1950’s, this eastward extension was banned from oil field development due to the ongoing west Wilmington subsidence problem. Even though the area had not been drilled, the depressurization effects extended over such a large area that eastern Long Beach also experienced some subsidence.

By the early 1960’s, when it became apparent that oil field subsidence could be controlled through water injection, a vote by the citizens of Long Beach lifted the ban. Restrictions were placed on oil field development to ensure subsidence would not occur and that the beaches and coastline would be protected. As with West Wilmington, law was enacted by the State of California to “unitize” the eastern portion of the field to ensure maximum recovery of the oil and gas, prevent subsidence, protect mineral rights owners, and protect the environment. Through legislation and legal agreements, the City, acting through the Department of Oil Properties, became the Operator of the Long Beach Unit, responsible for both oil and gas production and subsidence control.
Development began in 1964 with the building of four ten-acre offshore drilling and production islands. Subsea buried pipelines connect the islands to Pier “J” facilities onshore adjacent the Queen Mary. All four islands were required to be environmentally attractive and enhance the coastline through landscaping. No odors, vapors, sounds or pollutants were to escape the islands, and the two innermost islands were to have enclosed drilling rigs. The islands are named after the first astronauts to die in the U.S. space program: Grissom, White, Chaffee and Freeman.

Water injection commenced immediately with oil production in 1965 and elevations stabilized. Along with controlling subsidence, water injection as aided in the production of nearly one billion barrels of oil from the Long Beach Unit.
FUTURE SUBSIDENCE CONTROL

Daily operational control and monitoring of Wilmington Oil Field production and water injection by the Department of Oil Properties keeps subsidence in check. As long as oil and gas are produced, water injection volumes greater than the total fluids withdrawn will be required to maintain land and sea floor elevations. The estimated remaining field life is five to ten years for West Wilmington and ten to twenty years for East Wilmington, although these estimates are greatly dependent on oil price.

A combination of complex reservoir conditions and pressure communication with other large oil fields suggest that stable land elevations will require water injection for an indefinite period of time after field abandonment. The Department of Oil Properties will continue to be the land agency responsible for subsidence control, even after cessation of oil production.

Conventional rod leveling elevation surveys have been replaced by GPS (Global Positioning System) elevation surveys and real time elevation monitoring at fixed stations throughout the City and Harbor. A significant number of wells will be retained for future water injection and subsurface pressure monitoring. Parcels of land are reserved for the continuance of water injection and a Subsidence Fund is in place to fund the costs of revenues have ceased. Through regularly updated Post-Production and Strategic Plans, the City of Long Beach Department of Oil Properties is prepared for the future.

- Mike Henry, Dave Newman & DOP staff
On Thursday November 29, 2007 a PTTC workshop entitled “Recent Developments in Oilfield Distributed Power Generation and Other Power Saving Measures” was held in Valencia. This was the last in a long series of very successful technology sharing meetings for the west coast oil and gas industry. The West Coast PTTC was initiated in 1996 under the capable direction of Professor Iraj Ershaghi, Omar B. Milligan Professor and Director, Petroleum Engineering Program, University of Southern California. For eleven years Professor Ershaghi and many others designed and conducted more than 120 workshops and field trips for the benefit of west coast producers. All of this was done under the sponsorship of the United States Department of Energy and the University of Southern California. Numerous other organizations also supported the West Coast PTTC including PSAAPG, CIPA, WSPA, IOPA, CADOGGR, CSLC, MMS, LABSSPE, and SJVSSPE. The work shops were conducted in California and Alaska.

Money from the DOE for PTTC was eliminated from the 2008 budget. Financial support for it has been taken up by the American Association of Petroleum Geologists. Management of the West Coast PTTC has been passed over to Jerry Anderson of the Conservation Committee of California Oil and Gas Producers (CCCOGP). In January 2008 a new PTTC will emerge. As in the past the new West Coast PTTC will try to bring ideas and people together to improve the efficiency of our industry. There will be some changes. For AAPG’s support there are conditions. The fee for the workshops will increase to $100. There will be more formalized programs and the locations will be changed to reduce costs. In the past much of the actual cost of the meeting was paid through DOE support. Now the workshops will need to be self supporting unless we can get sponsorship. I would ask you to consider ways for your company to sponsor these workshops. Sponsorship can be as simple as providing a meeting location, or a lunch for the attendees. Cash contributions are always welcome.

AAPG President Will Green, of Midland, Texas, said “PTTC has perhaps the most successful scientific technology transfer program for the independent U.S. producer and has proven its value to the industry. The Association considers the program important for the industry, the members of AAPG and the country.”

I look forward to working with Jerry on the new workshops. I hope that you will share with us your ideas on how to continue the highly productive workshops. Finally I would like to thank Professor Iraj Ershaghi and his very capable staff at USC for doing such a wonderful job with the West Coast PTTC.

---

Professor Iraj Ershaghi
University of Southern California

Pacific Section AAPG members John Jepson and Don Clarke talk with high school students at the ATCE meeting in Anaheim last November. Nearly 300 students attended.
Monday with Miles

by Scott Hector

One of my best friends just passed away. He was often called “Mike”, but his real name was Miles. Miles Pepper.

Mike was one of the finest men I ever knew and seemed to have a wonderful marriage with his wife, Barbara. They had four children, two boys and two girls. I only met one, their daughter Polly. (Polly Pepper. That’s a great name!)

I visited them many times at their house in Granite Bay, California. This was a great house, set back off the main highway in a private development of little “ranchettes” in the Sierra foot-hills. Mike and Barbara’s lot had some big oak and pine trees, and some granite boulders in the front yard. They had some gorgeous plantings of flowers in the front yard which attracted a wide variety of birds, along with some squirrels and perhaps an occasional skunk or raccoon.

The rambling house was really spread out and Mike had added a big wing to it for his office. There, in his office he had many four-drawer files filled with well data and prospects, and a bunch of map racks stuffed with contour maps and cross-sections. His bookcases were so full they looked liked they would topple over from being so full, but they never did (at least, not while I was there). Mike even had his own blueprint machine and had an old silver paper printer machines with the old Petroleum Information microfilm data base of the Sacramento Basin. Though he did not have the computer skills considered necessary to be successful today, Mike continued to find gas “the old fashioned way” with pen and ink and white-out on parchment paper until his passing at age 87.

Mike had worked the Sacramento Basin for decades, including a long stint with Amerada Hess, which was the operator for the giant Rio Vista gas field (4 trillion cubic feet of gas, found in the 1930’s). But, for decades he consulted on his own and found not only natural gas but also oil for the likes of Hilliard Oil and Castle Minerals. When he passed on, he was the geologist for Castle Minerals, for whom he continued to find gas to the very end (and, I might add, two or three decades after most geologists call it quits!).

So, Mike had a vast amount of knowledge in his head (and on paper) about the basin. He was really good at knowing the stratigraphy and finding the subtle trap. He had written a classic paper on the Martinez Gorge, one of the famous Paleogene canyons cut into the sediments of the Sacramento Basin.

I took advantage of his close proximity to me, and often trundled up the hill some 30 miles from Sacramento to ask him a question or two. My presence seemed to be good for him too. I did not annoy him at all; he seemed to really like me there. I would try to come in themorning, thus setting us up for a nice trip to a place called “Spoons” where we would savor some truly delicious lunches.

We almost always got around to talking about THE WAR. World War II, I mean. Mike had been assigned to work on the bombers that were shellacking Germany. His first “sortie” was one in which many fellow bombers were shot down, but his plane made it back. He had to make 35 of the runs before he was done and the odds against making it back in one piece on all of those runs were small. But, he did. He had some close calls, but relished in telling me some stories. I believe that Mike reached the rank of Lieutenant Colonel before the war was over.

Mike and Barbara took many trips in their “later years”. I got to hear about a bunch of them, including a lot of trips designed to be a learning experience. Many of the trips they went on took advantage of “Elder Hostels”. They not only went rafting down the rivers in Utah and Colorado, but also accompanied Wally and Mary Fung and others on trips to China and the Copper Canyon in Mexico.

Mike was born in a little town called Elk on the northern California coast. He spent years in Bolinas, a small town just north of San Francisco on the Point Reyes peninsula, and also at Monticello, a small town on the western edge of the Sacramento Valley near Winters. The last location was flooded by Lake Berryessa. Unlike others I have known who lost a home to a dam, Mike seemed resigned to the fact that sometimes that had to be done. Once Mike finished a degree at Cal, his life took him away from California for work. He moved to Montana and was able to get a Master’s in geology at the Montana School of Mines. When life gave him a chance to return to a warmer climate, he came back to California.
I will always remember Mike and those visits. The depth of our friendship was perhaps best illustrated by the fact that he chose me to receive most of his geological library. And this happened even though his son-in-law, Owen Kittredge, had a geology degree and had worked with him for awhile. But, then again, Owen is now working in computers. As Mike said, he was “winding down”, only interested in working a few small areas of the Sacramento Valley for Castle Minerals, and hoped that I could benefit from some of his files. They have already proved a help to me and I know that they will continue to help me for decades to come. After all, the visits weren’t just to do official business like looking at a play or evaluating a log for gas or oil. They were to “get away” from the hustle and bustle of the office, sit down with a real, real good friend, and savor and love life. Goodbye, Mike. My Mondays will never be the same.

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BEN D. HARE, 62, died November 29, 2007, after complications from cancer. He was born on August 11, 1945, in Miami, FL, to Aubrey Dean and Betty Marie Hare of Bridge City, TX, while his father was stationed in Miami during World War II. Ben has always said they got him back to Texas as fast as they could. Ben graduated from Lamar University in Beaumont, TX, with a B.S. degree in Geology and went on to The University of Oklahoma to receive his M.S. and Ph.D. in Geology in 1973. He married Carol R. Gardner on June 19, 1971, in Norman, OK. He began his career in Tulsa, OK, with Amerada Hess Corporation as a senior geologist. He went on to work for Atlantic Richfield Corporation (ARCO) in Los Angeles, Denver, Dallas, and Anchorage, Alaska, from Senior Geologist to Anchor Fields Exploration Manager. In between, he was Exploration Manager and Senior Geologist for Edwin L. Cox Oil and Gas Producers in Dallas and Lake Ronel Oil Company in Tyler, TX. He was instrumental in starting up ARCO’s independent oil company Vastar in Houston as Onshore Exploration/Exploitation Manager and Senior Geologist. When British Petroleum took over ARCO, he formed his own consulting firm and worked in partnership with Legends Exploration run by Denny Bartell, another OU graduate. In 2004, he moved to Oklahoma City as Chief Operating Officer of Panhandle Royalty Company and in March 2006 also became Co-President. He and his Co-President, Michael Coffman, added new corporate direction and were instrumental in changing the company name to Panhandle Oil and Gas Company. He was a licensed Texas Geoscientist. As a member of the American Association of Petroleum Geologists, he was Certified Petroleum Geologist, served as chairman on several committees, and received a distinguished service award in 2001. At OU, he has served a director and chairman of the Alumni Advisory Council, School of Geology and Geophysics; director and chairman of the Board of Visitors, College of Geosciences; and part of the Presidential Task Force for the University. Over the years, he has recruited and encouraged dozens of young geologist and geophysists. He is survived by his wife Carol in Oklahoma City; his son Christopher Coleman Hare and wife Beth of Sydney, Australia; his son Patrick Hare and wife Shannon of Austin, TX; and their children. (Houston Chronicle, 11/30/2007)
Robert Paschall was born May 8, 1917, in El Paso, Texas and died December 8, 2007, in Bishop, CA. He was raised in the Los Angeles area and in 1938 earned a B.A. in Geology from UCLA. Paschall worked in the oil industry in Kern County and married Jeanette Stutzman of Bakersfield in 1941.

During World War II he served in U.S. Navy Air Intelligence and was based on the aircraft carrier Bunker Hill and several Pacific island locations. After the war, Paschall spent 18 years as an oil exploration geologist in Kern and Ventura counties.

In 1963, he became Chief Mineral Appraiser for the State of California Board of Equalization in Sacramento. After retirement from the state, Paschall was a widely respected consulting mineral properties appraiser. He and his wife, Jeanette, moved to Bishop in 1991 where he continued his appraisal activities throughout the United States.

Paschall wrote numerous papers and monographs on mining geology and minerals appraisal. He taught geology at both Oregon State and Sacramento State Universities, and was a noted expert on the San Andreas Fault. His son, Glenn Paschall of Seattle, daughter, Marjorie Grant of Sacramento, and five grandchildren survive him. His wife, Jeanette, passed away in 2004.
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### Alaska Geological Society

Luncheon meetings are held monthly September through May, usually on the third Thursday of the month, at the Anchorage Hilton (500 W. 3rd Avenue) from 11:30 a.m. to 1:00 p.m. The cost is $18 for members with reservations; no reservations add $5; non-members add $2. For reservations, call the AGS reservation voice mail at 907-258-9059 or contact David Hite at hiteconsult@acsalaska.net by noon on Monday before the meeting.

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### Coast Geological Society

Dinner meetings are held monthly September through June, usually on the third Tuesday of the month, at Biedermann Hall at Sacred Heart Church - 10800 Henderson Road in Ventura. Social hour starts at 6:00 p.m., dinner is served at 7:00 p.m., and the talk starts at 8:00 p.m. The cost of dinner is $18 (with reservations), $25 (without reservations), or $10 (students and K-12 teachers); the talk is free. For reservations, please email Christine White at cwhite@dcorllc.com or make reservations online at www.coastgeologicalsociety.org. Reservations should be made by 4:00 p.m. on Friday before the meeting.

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February 19th - Ray Ingersoll, USLA - “Paleotectonic Reconstruction of Southern California”

### Los Angeles Basin Geological Society

Luncheon meetings are held monthly September through November and January through June, usually on the third or fourth Thursday of the month, in the Monarch Room at The Grande at Willow Street Conference Centre (4101 E. Willow Street) in Long Beach. Lunch is served at 11:30 a.m., and the talk starts at 12:15 p.m. The cost is $20 (with reservations), $25 (without reservations), or $5 (students). Reservations can be made online at www.labgs.org or by contacting Jon Keuspert at jkuesper@breitburn.com or (213) 225-5900 ext. 224. Reservations must be made prior to Tuesday before the meeting.

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January 24th: Dr. Azzam Alwash “Restoration of the Tigris & Euphrates marshes in Iraq, and other topics”
February 3rd: Fieldtrip - Neogene Extensional Tectonics & Sedimentation, Coastal Southern California
February 28th: Dr. Gregory Holk “Stable Isotopic Clues to Fluid Pathways in Major Crustal-Scale Fault Zones”

### Northwest Energy Association

Luncheon meetings are held monthly September through May, usually on the second Friday of the month, at the Multnomah Athletic Club (1849 SW. Salmon Street) in Portland. Meeting time is at 7:30 - 9:00 am. The cost is $15. For information or reservations, contact Shelley Thomas at 503-848-2947 or Treck Cardwell at 503-226-4211 ext. 4681.
Member Society News

Northern California Geological Society

Evening meetings are held monthly September through May, usually on the last Wednesday of the month, at the Masonic Center (9 Altarinda Road) in Orinda. Social hour starts at 6:30 p.m., and the talk starts at 7:00 p.m. (no dinner). For reservations, leave your name and phone number at (925) 424-3669, or at danday94@pacbell.net before the meeting. Cost is $5 per regular member, $1 per student member.

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barbara.matz@shawgrp.com
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Danville, CA 94506-1130

Sacramento Petroleum Association

Luncheon meetings are held monthly January through November, on the third Wednesday of the month at the Hungry Hunter Restaurant (450 Bercut Drive) in Sacramento. The meetings starts at noon. The cost is $16. For information or reservations, contact Pam Ceccarelli at 916-322-1110 or pceccare@consrv.ca.gov.

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Vice President: Marc Brennen
Secretary/Treasurer: Pam Ceccarelli

Contact: Rick Blake
925-422-9910
P. O. Box 571
Sacramento, CA 95812-0571

San Joaquin Geological Society

Dinner meetings are held monthly October through June, usually on the second Tuesday of the month, at the American Legion Hall (2020 H Street) in Bakersfield. The icebreaker starts at 6:00 p.m., dinner is served at 7:00 p.m., and the talk starts at 8:00 p.m. The cost of dinner is $20 (with reservations) or $23 (without reservations); the talk is free. For reservations, contact Janet AcAlee at jmcalee@pxp.com or (661) 395-5438.

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