

Pacific Section • American Association of Petroleum Geologists

July & August 2015



2015 PSAAPG CONVENTION Post-Convention Issue

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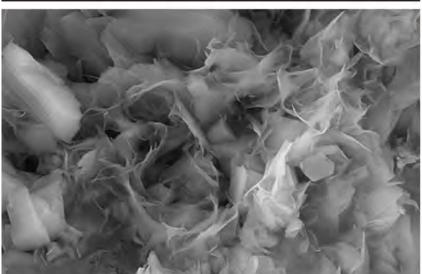
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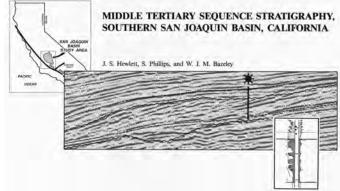
Tom Howard, Image Analyst tomh@payzoneinc.com 832-407-2862







PSAAPG Has A New Publication – MP 51



"This publication follows from a technical project in the ARCO sequence stratigraphy group in Plano, Texas. This study was published as an internal company research report in 1989 in the early days of sequence stratigraphy. Twenty-five years later, the authors chose to not alter the original text and figures except to satisfy a few publication requirements – we hope the studies contribute to understanding the future exploration potential of the southern San Joaquin basin."

Originally published in-house in 1989 by ARCO: Hewlett, J. S., Phillips, S., & Bazeley, W. J. M.

This is an 11" X 24" spiral-bound book with B/W and color figures, 73 p. (1st edited version)

To purchase this publication you may go to the PSAAPG.webpage (www.psaapg.org) and download the publication ordering form or you may contact Larry Knauer (PS-AAPG Publications Chair) at larryknauer@chevron.com. Cost is \$85 + S&H.

2014-2015 Officers

President	John T. Williams 805-231-3793	4-5	President	t's Message •	John T. Williams
	jtw@petrolog-geological.com president@psaapg.org	6	Editor's	Corner •	Vaughn G. Thompson
President-Elect	Kurt Neher 661-412-5203 kurt.neher@crc.com president-elect@psaapg.org	7-18	PSAAPG	Convention 2015	5 Sponsors Joan Barminski Honors and Awards President's Award
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	vicepresident@psaapg.org	19	PSAAPC	G Convention 201	5 • PSAAPG Awards
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Treasurer 2014-2015 car	Cameron Campbell 661-654-7429 neron.campbell@chevron.com treasurer@psaapg.org	COV	FR PHOT	D . Suprise over t	he Ventura Harbor. A
Treasurer Elect 2014-2015	Rebecca Greenberg DeMarais 661-412-5188 rebecca.greenberg@crc.com treasurer@psaapg.org	perfe snap	ect beginn ped this sł	ing to a great fie	eld trip. Jerry Nichols ng on the PSAAPG field
Past President Editor-in-Chief 2014-2016	Dan Schwartz 661-665-5832 dschwartz@aeraenergy.com president@psaapg.org Vaughn G. Thompson 661-412-5452 vaughn.thompson@crc.com	• In le d	nages (grap east 300 dpi pi.	THE EDITOR at ed phics, photos, and so resolution. Text sho tos, illustrations (lin	ould be at least 600
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Web Master	Jason Minch 661-412-5206 Jason.Minch@crc.com webmaster@psaapg.org	Men	nbers	Advertising Ra	Year(6issues)
Membership Chair	Randall Stephenson 661-665-5599 KStephenson@aeraenergy.com	Halj Qua	Page Page erter Page iness Card	\$400.00 \$250.00 \$150.00	\$1600.00 \$1050.00 \$650.00 \$250.00
Publications Chair	Larry Knauer 661-392-2471 LarryKnauer@chevron.com		So	ocieties Free Adve	rtising:
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JRS chwalbach@aeraenergy.com

John T. Williams, Pacific Section AAPG President's Letter

Passing the Baton

I am very proud of the work the PSAAPG Executive Committee, Chairs and Foundation completed in the 2014-2015 year. One of the most exciting advancements included the first Young Professional Distinguished Service Award. It was enthusiastically approved and first awarded at the All Convention Luncheon, Embassy Suites, Mandalay Bay Beach Resort on May 4th, 2015. Bob Lindblom and I had the honor of presenting four crystal globes on crystal bases to Jonathan Allen, Anne Draucker, Becca Schempp, and Vaughn Thompson.



At our last ExCom meeting on June 9th, the PS approved to increase funding for the IBA and Student Job Expo. The Imperial Barrel Award competition has become an international collegiate competition for aspiring petroleum geologists, advanced within Pacific Section by Dan Schwartz, Cynthia Huggins, Cameron Campbell, and others. Seven Universities in the Pacific Section competed and the University of Alaska Fairbanks received highest honors. Alaska went on to compete in Denver at the AAPG ACE for the worldwide competition finals. The annual Student Exposition and Job Fair is held at CSU Northridge, and is led by Dr. Kathleen Marsaglia. It is the premier job fair in western North America. Cynthia Huggins, Chair of the Scholarship Committee, leads the Pacific Section effort. She and others work with Kathleen to create a great event. They recruit poster judges, arrange hotel accommodations, find field trip leaders, conduct job interviews, handle logistics, and more. Approximately 140 students from Alaska to Mexico participated. It was a privilege to participate in this three day event. The increased funding that has been approved for these student outreach activities is an example of an exceptional culture of greatness; we can be proud.

"Catch the Energy Wave!!" Joan and Mike Barminski, Convention Co-Chairs led the Pacific Section to an outstanding and successful Joint Annual Meeting. The attendance was significantly higher than expected at 534 registered. I personally enjoyed the luncheon speaker; student Q&A session, led by Becca Schempp; Monterey Core Workshop, Jon Schwalbach; Upper Modelo Fm - Eastern Ventura Basin Field Trip, Greg and Stewart Gordon; Panaro Brothers Wine Tasting and Hospitality, Cindy Williams and Dina Schwalbach; and much more. Short Courses and Field Trips were sold out. It is truly remarkable that such an in depth and varied venue is enthusiastically assembled and successfully delivered by a volunteer force. The Pacific Section reaches above and beyond our seemingly limited resources. Our seasoned and young professionals along with student volunteers are remarkable. Sponsors and exhibitors commented that this convention was a success. The Pacific Section is full of exceptionally talented people who have given generously to the industry and community.

The Coast Geological Society hosted our Convention. Its members and officers were an important part of the Convention Team. CGS volunteers continuously 'manned' the registration booth and the CGS booth. CGS President, Bob Blackmur, and his officers designed and marketed custom shirts and hats, to raise money for scholarships. Our PSAAPG booth and bookstore continued its tradition of raising more funds for scholarships. Larry Knauer, Mark Wilson, John Minch and others are dedicated to this outreach; simultaneously they have a good time. Geologists love to buy good technical literature, both old and new – including our 2014-2015 Publication MP51. Larry has your copy ready for delivery.



Our web site has improved and is being continuously upgraded. Jason Minch has advanced our site. Nate Fisher has been brought on board to help us with highly technical web site development. Jason and Nate together bring young enthusiasm that will help us to continuously upgrade our site to be a reliable go-to site for petroleum geologists.

The Pacific Petroleum Geology Newsletter continues to be exceptional. Vaughn Thompson, Editor, has followed and filled the giant footsteps left by Tim Elam, past-Editor. Vaughn has consistently delivered a timely and thought provoking Newsletter. He has accomplished this along with his full time job at CRC and family responsibilities that include his energetic one-and-a-half-year-old son, Lucas. Thank you to Vicky for sharing Vaughn with the PSAAPG. Vaughn has published an exceptional series on the Historic Development of Fracturing and Hydraulic Fracturing by Stephen M. Testa. This type of timely and informational article helps make our publication exceptional.

I would like to congratulate our newly elected officers. Dr. Robert 'Bob' Horton, President-Elect; Laura M. Bazeley, Vice President; Shane Peterson, Secretary; and Dr. Lisa Alpert, Treasurer-elect. It is an honor to congratulate the newly elected and to encourage the others to run again. I have treasured my last two years as President-elect and President. I have enthusiastically enjoyed my time and look forward to being past-President and working to assist Kurt Neher, PSAAPG President 2015-2016. One of my ambitions is to visit our far flung Societies as a good will ambassador promoting the many benefits affiliation that our Section affords. Our other ExCom officers for the coming year include Rebecca Greenberg DeMarais, Treasurer and Vaughn Thompson, Editor. Our newly elected AAPG Advisory Council representative is Tony Reid, succeeding Jon Schwalbach. ExCom Officers moving on include: Dr. Dan Schwartz, past-President; Dr. Jonathan Allan, Vice President; Malcolm Allan, Secretary; and Cameron Campbell, Treasurer. My special thank you goes to Malcolm for thoughtfully and professionally assembling each meeting agenda. Thank you for all of your assistance and service to the PSAAPG.

Lastly, I truly thank all Officers, Chairs, and Foundation, and other volunteers for making our year great. It has been my honor to serve you in this prestigious organization. I would like to write more; there is much more that could be told and expounded upon – but I suspect it will not pass Vaughn.

May you have good ventures, and I wish success to all of the Pacific Section AAPG.

Pacific Section AAPG President 2014-2015, John T. Williams

Question from the President, for the curious: (find answers on page 25)

Name four petroleum geologists in the PSAAPG who were born in 1925 or earlier? Thank you for your service wisdom.



Dear friends and colleagues,

It's been a great year for the Pacific Section AAPG. This newsletter marks the ending of another fantastic year for our society. We had another hugely successful Annual Convention and PSAAPG would like to thank all those involved for making our flagship event triumphant. We would especially like to thank Joan and Mike Barminski for their exceptional diligence and hard work! Also, thanks to all of those that submitted photos of the convention and field trips, and especially to Brian Pitts for being this year's professional photographer.

This is a busy time of year for PSAAPG and its sister organizations, with many Executive Committee member changes and societies gearing up for their Fall programs. PSAAPG voting is in and this issue marks its passing of the baton!



I would like to personally thank John Williams and the outgoing PSAAPG officers for their

contribution to PSAAPG and all their input into the PPG. I am looking forward to working with the new officers over the next year. I would also like to thank Tim Elam, Evan Bargnesi, and Larry Knauer for their continued input and help with the editing of PPG.

Announcement:

PSAAPG members Kay Pitts, Don Clarke, and John Minch were honored at the 2015 AAPG Annual Convention in Denver. See the write up on page 19.

Sincerely, Vaughn



Thank you to the following companies for their generous contributions and support!



Convention 2015 - It's a Wrap!

It's all about the people. Conventions happen only with dedication in pursuit of a great meeting. And 2015 was no exception to the rule - everyone pitched in and brought home the reward. It truly was a resounding success even in the face of a downturned market. Spirits were high the entire week, from the first short course on Saturday to the closing field trip on Friday, a very full week indeed.

I extend many thanks to the entire Convention Committee. Recognition is sincerely deserved for the hours of work and even more for the creativity each and every person brought to the table. Developing the technical program, the backbone of our conventions, was masterful this year. Complementary short courses brought depth and hands-on experience to those lucky enough to participate. And the field trips, which is what brought most of us geologists into the profession in the first place, covered a wide range of exposures traversing from the islands to the coast to the mountains. And all this went off without a hitch, with logistics gracefully handled behind the scenes in coordination with the hotel to make the venue the best possible setting for the convention.

From students to emeritus members, registration resulted in over 500 attendees. The icebreaker in the exhibit hall brought everyone together for fellowship, as did the poster sessions and the great technology and educational displays provided by the many-faceted exhibitors.

Underpinning the Pacific Section Convention and supporting the Pacific Section AAPG, Pacific Section SEPM, and the Pacific Coast Section SEG in our endeavors to advance our societies' missions are the sponsors who generously provided the financial wherewithal for success. We are indebted to these folks and say a sincere thank you to one and all.

The Coast Geological Society, the host, put its back into the Convention, bringing energy and enthusiasm, which went a long way to making the process enjoyable. Stalwarts from the San Joaquin Geological Society provided continuity and knowledge of best practices. And the cross pollination from the combination of AAPG, SEPM, and SEG Pacific folks created a team who caught the energy wave and rode it through Convention 2015. Cowabunga!

- Joan Barminski, General Chair



A smile says a thousand words. Joan Barminski.

H. Victor Church Memorial Award

The H. Victor Church Memorial Award is given by the Pacific Section American Association of Petroleum Geologists in recognition of the best poster presented at the annual Pacific Section meeting. The H. Victor Church Memorial Award was established as the result of individuals wanting to build a lasting memorial to the technical prowess of Dr. H. Victor Church. The focus of the award is on creative thinking toward new ideas in exploration, development geology, or foundational geology. Peers judge the posters at each session and scores are compiled and reviewed by the convention judging committee to determine the overall winner.

The winner of the Best Poster at the 2014 Pacific Section AAPG Annual Meeting in Bakersfield, CA April 27-30 is **Matthew Van Grinsven**, Graduate student, California State University at Bakersfield. Mr. Van Grinsven presented the poster entitled *"Evaluation of Calleguas Creek as a Source of Sand at ODP site 1015 on the Hueneme-Mugu Submarine Fan, Santa Monica Basin, CA."* The co-author is Kathleen M. Marsaglia, PhD, California State Univ. at Northridge.



From left to right: John T. Williams, Matthew Van Grinsven, and Bob Lindblom.

A. I. Levorsen Memorial Award

The A. I. Levorsen Memorial Award is given by the national American Association of Petroleum Geologists in recognition of the best paper presented at each AAPG section meeting, with particular emphasis on creative thinking toward new ideas in exploration and developmental geology. AAPG members who volunteer their time at each meeting judge the papers in each session. The session scores are compiled and reviewed by the convention judging committee to determine the overall winner.

The winner of the A. I. Levorsen Memorial Award for the Best Oral Presentation of a Paper at the 2014 Pacific Section AAPG Annual Meeting in Bakersfield, CA April 27-30 is **Michael D. Henschel**, MDA Geospatial Services, Ottawa, ON, Canada. Mr. Henschel presented the paper entitled *"Long Term Operational Observation of Ground Deformation in the San Joaquin Valley."* The co-authors are Benjamin Deschamps, Shinya Sato and Gillian Robert, MDA Geospatial Services, Ottawa, ON, Canada.



Michael D. Henschel.

Young Professional Distinguished Service Award

The YP Distinguished Service Award was defined and proposed by the Section's Executive Committee in 2014. It was presented at the Section's Annual Meeting in Oxnard, CA in 2015. The award is bestowed upon practicing petroleum geologists who are under 35 years of age or who have been employed as a petroleum geologist for less than 10 years. The Honoree has volunteered and demonstrated excellence, enthusiastic participation, organization creativity, leadership and passion for the geological sciences.

This year the Section honors: Jonathan P. Allen, Anne C. Draucker, Rebecca K. Schempp, and Vaughn G. Thompson.



From left to right: John T. Williams, Rebecca K. Schempp, Anne C. Draucker, , Vaughn G. Thompson, Jonathan P. Allen, and Bob Lindblom.

Distinguished Service Award

The Distinguished Service Award was defined and proposed by the Section's Executive Committee and passed by the membership in 2002. It was first presented at the Section's annual meeting in Long Beach in 2003. The award is bestowed upon members "in recognition of singular and beneficial long-term service to the Section and or affiliated Societies. The term singular does not necessarily mean without precedent, But rather the activity is specific as distinguished from general service."

This year the Section honors: Laura M. Bazeley and David C. Salter.



From left to right: John T. Williams, David C. Salter, Laura M. Bazeley, and Bob Lindblom.

Distinguished Educator Award

The Distinguished Educator Award is given by Pacific Section in recognition of distinguished and outstanding contributions to geological education and counseling of students.

This year the Section honors: Kathleen M. Marsaglia, Ph.D., Cal State University Northridge, Northridge, CA



From left to right: John T. Williams, Kathleen M. Marsaglia, and Bob Lindblom.

Honorary Life Membership

Honorary Life Membership is Pacific Section's highest honor. It is bestowed upon members who have distinguished themselves by their contributions and devotion to the science and profession of petroleum geology and by outstanding service to the Pacific Section.

This year the Section honors: Cynthia A. Huggins and Jon R. Schwalbach, Ph.D.



From left to right: John T. Williams, Jon R. Schwalbach, Cynthia A. Huggins, and Bob Lindblom.

President's "Above and Beyond" Award 2015

Joint PSAAPG and Coast Geological Society President's Award: Muriel R. Norton

Presented by John T. Williams and Bob Blackmur

For: "Rare and Exemplary Spirit of Service" to both the PS-AAPG and CGS. For over 30 years, Muriel has been an active member in her profession as a geologist and geophysicist at SubSea System Corporation. For 25 years, she has, with great care, humble, and quiet dedication, served The Coast Geological Society. For 250 CGS meetings, she has tirelessly been our regular and continuous buyer. Muriel has seen the passage of 25 presidents, and she has been our thread of continuity and comfort at Coast for all these years. Thank you, Muriel.

PSAAPG President's Award: Robert "Bob" G. Lindblom

Presented by John T. Williams

For: "Rare and Exemplary Enthusiasm, Professionalism and Sprit of Service." For nearly 70 years, Bob has been active in his profession as a petroleum geologist at Chevron Corporation. He is a leader in the California State Board of Registration for geologists, a Professor at Stanford University with focus on Advanced Topics in Well Logging and Applied Applications in Well Logging, and he is a consultant to Stanford University aiding in the management of its extensive Mineral Resources. Bob has been honored as a Distinguished Member of the AAPG in many roles and is the chair of the PSAAPG Honors and Awards Committee. Lastly, Bob is a sterling host and gracious gentleman. Thank you, Bob.



From left to right: John T. Williams, Muriel R. Norton, and Bob Lindblom.

Student Panel Discussion

For the third consecutive year a panel discussion was held at the Pacific Section AAPG meeting for Students with Practicing Geoscientists. This year's session highlighted the growing Visiting Geoscientist Program, a program that enables students to request a Professional Geoscientist to come speak to their school on a technical topic of their choice. The session was well attended with 26 students and 4 faculty advisors. Becca Schempp, the Liaison to Student Chapters for Pacific Section AAPG facilitated the panel.

It was a good session with a very diverse panel that showed the students the diversity of careers and types of people who pursue geoscience careers. Panelists were: Cameron Campbell - Chevron, Jonathan Allen - Chevron, John T. Williams - Petrolog Geological and Pacific Section President, Randy Stephenson - Aera Energy, Tom Kane - ExxonMobil, Dan Schwartz - Aera Energy, and Michelle Judson - BP (Retired).

Students were able to submit questions prior to the session. Questions ranged from, "how did you decide on geology," to "what can we do to make an impression," to "how do you deal with negative opinions of the industry." The last question tied in well with the All Convention Luncheon speaker, Alex Epstein's message about the industry and its benefit to human well-being.

The session lasted an hour with many of the students lingering afterwards to speak one-on-one with the panelists. It's these types of interactions that the students relate to the most. Hearing the honest answers of the panelists reminded the students that we all started in school and struggled with many of the same issues. But, with hard work, dedication, passion for our science and patience in a slower economy the end goal of a career as a Geoscientist is within reach.

The Pacific Section is in need of Visiting Geoscientists. We need to connect our professional community with the next generation of Pacific Section Geoscientists. If you are interested in becoming a Visiting Geoscientist please contact Michelle Judson. Young Professionals are welcome as well. Mhjudson@gmail.com

Thanks, **Becca Schempp**



PSAAPG Convention 2015 • Some Fun!



John T. Williams and Charles A. Sternbach sharing some good moments. Charles gave the AAPG-DPA luncheon talk: "Heritage of Discovery: Resources for Explorers."



Mark Wilson always hard at work behind the scenes.



Mike Barminski, Steve Richardson, and Kay Pitts. P.S. Congratulations Kay (see p. 19 for the scoop).



The esteemed Abby and Ariel Auffant. Congratulations and good luck Ariel for your upcoming SJGS Presidency.



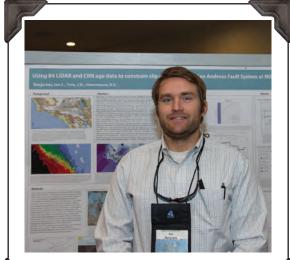
Dr. Richard Behl and his excited audience on the mixed siliciclastic siliceous Monterey Formation field trip on Sunday, May 3rd, 2015.



I wonder if he knows he has been voted President-Elect of the PSAAPG? Dr. Robert Horton always supporting us.



Friends hanging out in the book club. From left to right and top to bottom: Mario Caputo, Larry Knauer, John Randall, Bob Lindblom, and Mark Wilson.



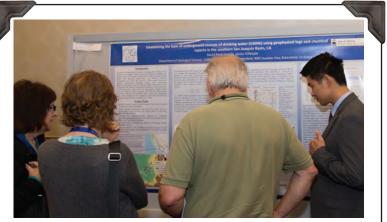
Student, Ian Desjarlais, with his thought provoking poster.



Left to right: Bob Ballog, Larry Rogers, and John T. Williams. Larry was honored at the convention as the Teacher of the Year! Larry teaches 8th grade at Chaparral Middle School in Diamond Bar. He has been teaching for 28 years.

His goal as a teacher is to involve his students in real world assignments that teach them to integrate all types of data into their scientific thinking.

P.S. Larry taught all of the late Greg Hummel's children and Greg nominated Larry for TOTY.



Professor Rob Negrini and Jana McIntire admiring a great Student Poster by David Kong.





Anne Drauker has the whole world in her hands.



A friendly face we all know! Kurt Neher is the incoming President of PSAAPG!



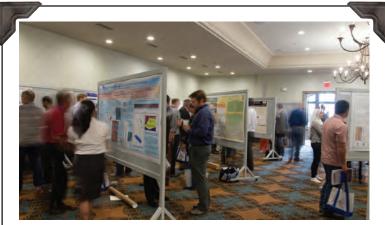
Tim Elam, the post PSAAPG Editor-In-Chief. Another one of those guys that's always around helping out where he can.



Organic rich source rock of the Monterey Formation near Pt Dume, CA. Photo taken on the mixed siliceous Monterey Formation field trip on Sunday, May 3rd, 2015.



Good friends of PSAAPG, Don Clarke and Glenn Gregory. Don was recently honored by AAPG at the Annual Convention in Denver (see p. 19 for more).



The future of our business: student Posters were a huge highlight of the convention. PSAAPG thanks you for the great work and highly professional presentation of your posters.





Larry Knauer and Marck Maroun working hard to help get everything set up.



A stop on the Santa Cruz Island Tour. A great look at left lateral stream offset along the Santa Cruz Island Fault.



The ever-present Larry Knauer quietly leading many projects within the ranks of PSAAPG.





..... and don't forget the PSAAPG and Rocky Mountain Sections Joint Meeting in Las Vegas from 2-5 October 2016.

San Joaquin Geological Society Annual Fall Classic Golf Scramble and Barbeque

Early SJGS foursome line up a putt





Friday, September 25th, 2015

1. Golf Tournament at Sundale Golf Course Breakfast and a BBQ lunch courtesy of Halliburton Chuck Wagon And Schlumberger BBQ'ing little Hoagies and Chicken sticks

7:30 am Shotgun Start \$95/Person

Includes: Green Fee, Cart, Breakfast, Lunch, Drinks & Tee Prizes

2. Family BBQ and Prizes at the Kern County Museum BBQ Dinner prepared by Drew Hutto

Dinner to include Brisket, Pork Ribs, Pulled Pork, and Tri Tip with all the fixin's

Happy Hour at 5:00 PM Dinner at 6:00 PM

Adults \$25.00 Students \$10.00 Children \$5.00

Please <u>RSVP</u> by Tuesday, September 22ND (For BBQ) – Help the Planners (*Prepay online at http://sanjoaquingeologicalsociety.org/or you may pay at the event*)

BBQ RSVP: John Abeid @ John.Abeid@chevron.com or online

Registered Players	Golf \$	BBQ\$
Golfer 1		
Golfer 2		
Golfer 3		
Golfer 4		
Total \$		
Contact email:	Con	tact Phone:
	Golfer 1 Golfer 2 Golfer 3 Golfer 4 Total \$	Golfer 1



Honorary Member Award

Honorary Member is bestowed upon persons who have distinguished themselves by their service and devotion to the science and profession of petroleum geology and to the Association. By Executive Committee action, this has been designated AAPG's third most distinguished award.

Kay L. Pitts, Consultant, Bakersfield, California.



Distinguished Service Award

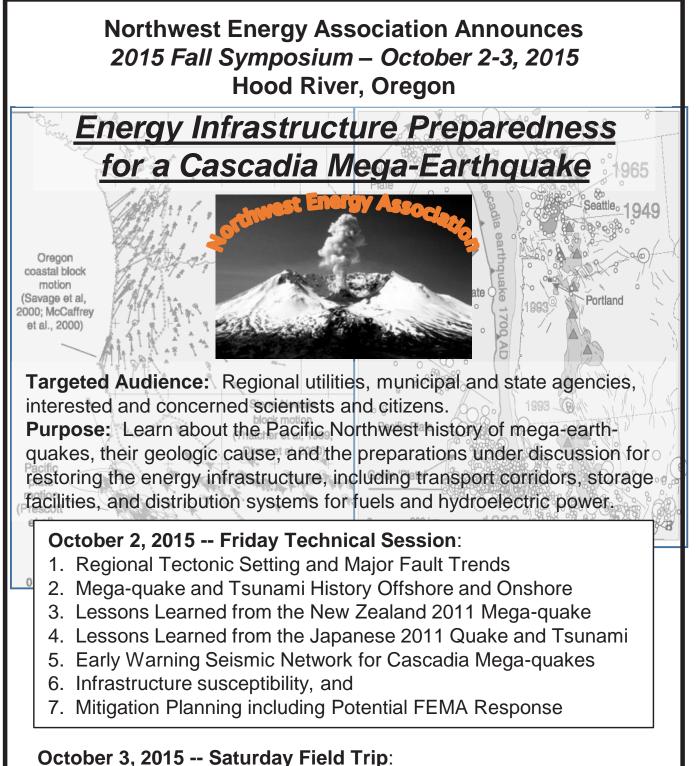
Presented to those who have distinguished themselves in singular and beneficial long-term service to AAPG.

John A. Minch, John Minch and Associates, Mission Viejo, California.



Honorary Member of the House Award

Donald Dean Clarke, Consulting Petroleum Geologist, Lakewood, California.



Ancient and active landslides within the scenic Columbia River Gorge, the main east-west corridor for highway and rail transport of critical materials including coal and oil.

Program Details and Registration at <u>NWEnergyAssociation@gmail.com</u> Contact: General Chair John Armentrout at <u>jarmenrock@gmail.com</u>

Early Sea Floor Mapping in Santa Barbara Channel

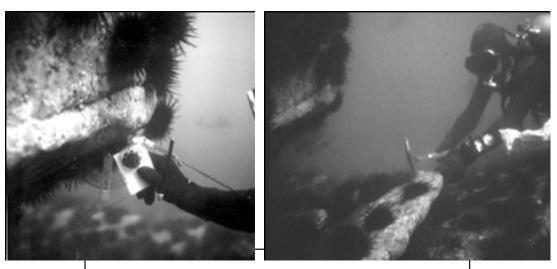
Santa Barbara Channel offshore drilling began in 1896 when the Summerland Oil Field was extended by drilling from wooden piers. The field's production declined rapidly and the wells were abandoned several years later. It was not until the Supreme Court recognized the State's ownership, out to three nautical miles, in 1947 that interest in the Channel from major oil companies began again. The problem was how to collect important surface geologic data.

Jacques Cousteau and Emile Gagnan, in 1943, built the first demand valve allowing divers to breathe compressed air underwater. It was not until a documentary of Cousteau's book "The Silent World" won an Oscar in 1953 that there was much interest in scuba diving, There were very few scuba divers in the 1950's and even fewer diving scientists. Several Oil Companies started hiring a few diving geologists.

A 1962, World Oil magazine article stated:

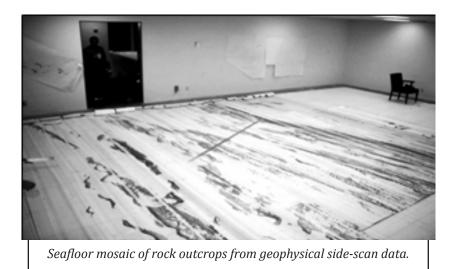
Diving geologists are starting to study formations, obtain rock samples, and otherwise map ocean-floor outcrops in much the same manner as geologists do onshore.

Oil companies, interested in offshore exploration, were searching for ways to collect surface geological data from the Santa Barbara Channel in the late 1950's and early 1960's. A group of geology professors from the Scripps Institute of Oceanography and the nearby San Diego Naval Lab formed "Geological Diving Consultants" that contracted with several major companies to map the Channel using scuba. As a graduate student at USC I was hired to assist these professors on weekend trips to the Channel. "Geological Diving Consultants" later became "General Oceanographics". First we would usually survey the ocean floor with side-scan sonar to identify any outcrops. Then, especially in the 1970's and 1980's, we would construct very large mosaics showing where the outcrops were located. Diving geologists, using these mosaics, would dive on the outcrops to take measurements and to collect samples. We would also use a surface ship to collect samples by dredging and coring.



Mapping and collecting samples (1960s).

Several oil companies hired us to collect proprietary data for them but we also put together data packages that we sold to interested oil companies. Richfield and Union were pioneers in using this data closely followed by Mobil, Chevron, Texaco, Phillips and several others.





"Geological Diving Consultants" dive boat.



"M/V Oil City" "General Oceanographics" geophysical, dredging, coring, and dive support vessel.

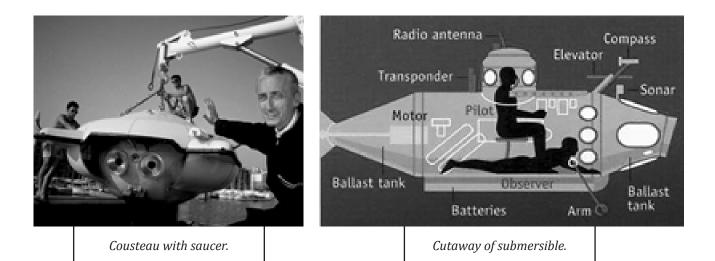


Fresh tar from vent, ≈ 90 '.

An interesting sidelight was our discovery of submarine tar seeps which we published in a 1963 AAPG article. Tar floating on Southern California nearshore waters was commonly found washed up on local beaches and stuck on the feet of annoyed beach-strollers. Leaky tankers traveling in the Santa Barbara Channel were the suspected culprits.

Some tar mounds were up to a hundred feet in diameter and eight feet high. They resembled miniature shield volcanoes or cow pies. The tar formed when heavy California crude oil seeped up through seafloor cracks and struck cold water. Thin whip-like strands of fresh tar, some up to twelve feet long, rose up into the water column from a mound's central vent. These long strands, waving in the current, would eventually break off and float to the ocean surface where they would be torn apart by waves and shaped into small balls of tar. Many of these balls eventually washed ashore on nearby beaches. Over the years extensive Channel drilling slowed and even stopped most of the tar seeps.

After a few years of mapping the Channel we were asked to dive deeper. The only way was to use a submersible or hardhats, mixed gases were not available during this time. Jacque Cousteau brought his diving saucer, La Souscoupe, a sluggish two-man submersible out to California in 1964 hoping to find some work. It was hired by Shell Oil to inspect an underwater drilling complex off Santa Barbara, probably the first use of a manned submersible by an oil company. "General Oceanographics" had a small two-man submersible, which could dive to 1,000 feet, built for them in Torrance which they named Nekton. This submersible and three more like it were used to map and collect samples from the Channel seafloor for the next thirty years by 'General Oceanographics', "GeoCubic" and "Delta Oceanographics" (all geological consulting groups that I was associated with).





Nekton Alpha, Nekton Beta and Nekton Gamma.

Richard A. Slater Ventura, CA

Alaska Geological Society

Alaska Geological Society luncheon meetings are held at the BP Energy Center in Anchorage, Alaska. The meetings are typically scheduled on the 3rd Thursday of each month 11:30 AM – 1:00 PM

Coast Geological Society

Off for the Summer. Back in September.

Dr. Robert Anderson presenting "Curiosity Adventures: The Road to Mt. Sharpe, Planet Mars." This will be at the General Meeting September 15, 2015, Poinsettia Pavilion, 3451 Foothill Road, Ventura, CA 93003. The social hour starts around 6:00 pm and dinner is served at 7:00, with the presentation starting just before 8:00 pm. Our meetings are open and free to the public

L.A. Basin Geological Society

Off for the Summer. Back in September.

Northern California Geological Society

Off for the Summer. Back in September.

September 30th, 2015 7:00 pm Speaker: Dr. Gregory Beroza, Stanford University, Berkeley Seismological Laboratory - Lawson Lecture "Induced Earthquakes in the 21st Century"



NCGS Field trips

July 25th, 2015 Leaders: Joe Beall, Senior Geologist, Calpine Corporation, and Craig Hartline, Senior Geophysicist, Calpine Corporation "The Geysers - Geothermal Energy"

Northwest Energy Association

Off for the Summer. Back in September.

October 1-3, 2015: NWEA Fall Symposium in Hood River, Oregon

Energy Infrastructure Preparedness for a Cascadia Mega-Earthquake Northwest Energy Association 2015 Fall Symposium – October 2-3, 2015 Hood River Inn, Hood River, Oregon

Targeted Audience: Regional utilities, municipal and state agencies, interested and concerned scientists and citizens.

Purpose: Learn about the history of mega-earthquakes and their geologic cause and the preparations underway or needed related specifically to energy infrastructure, transport corridors, storage facilities, and distribution systems for fuels and power.

Registration: Begins August 3, 2015 - Motel block available now (541-386-2200)

Sacramento Petroleum Association

On Wednesday, July 15th, SPA presents **Charles Grix**, president, Jilcat Industrial Marketing Group (JIMG). Lunch will be served at noon at the Club Pheasant, West Sacrament... All are welcome. No need to RSVP.

Charles will be discussing the unique features of nano-based hydrocarbon metal treatment products and how they can benefit the oil and gas exploration industry. These products have been used by all branches of the military, NASA, government agencies and Fortune 100 companies. They have also been used by all the major oil companies and energy companies such as Haliburton.

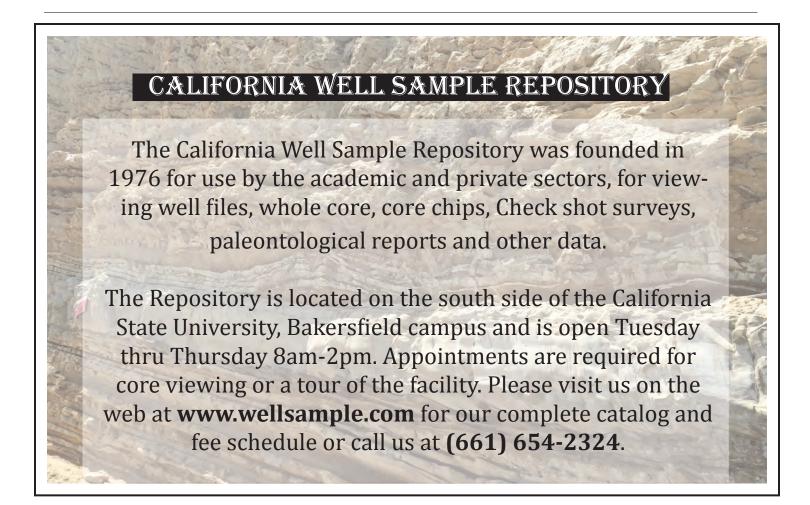
San Joaquin Geological Society

Off for the summer. Back in October.

Mark your calendars for our annual SJGS Golf Tournament & BBQ being held on **September 25, 2015!!!** You can find the available documents for individual golf & golf sponsorship, hole sponsorship, & BBQ on our website.

ANSWERS TO PRESIDENT'S MESSAGE QUESTIONS, page 5:

Bob Lindblom, Bob Hindle, Bob Beringer, and Frank Getz. Thank you Bob, Bob, Bob and Frank, I appreciate your service and priceless wisdom.



Alaska Geological Society www.alaskageology.org

P. O . Box 101288 Anchorage, AK 99510 Contact: Eric Cannon eccannon@gmail.com



Luncheon meetings are held monthly September through May, usually on the third Thursday of the month, at the BP Energy Center (1014 Energy Court) from 11:30 a.m. to 1:00 p.m. The hot lunch cost is \$20 for members with reservations; \$22 for non-members with reservations; and \$25 without reservations. The box lunch cost is \$13 for members with reservations, \$15 for non-members with reservations, and \$18 without reservations. 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.

- President: President-Elect: Vice-President: Secretary: Treasurer: Past-President:
- Matt Frankforter Keith Torrance Monty Mabry Eric Cannon Alan Hunter Ken Helmold

mfrankforter@hilcorp.com ktorrance at apcservicesllc.com monte.mabry@bp.com eric_cannon@golder.com paleoman@mac.com ken.helmold@alaska.gov

Coast Geological Society www.coastgeologicalsociety.org

P. O. Box 3055 Ventura, CA 93006

Contact: Peter Morris 805.745.2149

Dinner meetings are held monthly September through May, on the third Tuesday of the month, at Poinsettia Pavilion, 3451 Foothill 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 with reservations is \$20 (members), \$25 (non-members), or \$10 (students and K-12 teachers). For reservations, please email Bonnie Walters (secretary@coastgeologicalsociety.org), and should be made by 4:00 p.m. on the Friday before the meeting.

President:	Bonnie Walters
Past President:	Bob Blackmur
Vice President:	Alastair Haddow
Secretary:	Eric White
Treasurer:	Theresa Heirshberg
Membership chair:	Nick Kunstek
Webmaster/Tech Support:	Whit Skaling

president@coastgeologicalsociety.org pastpresident@coastgeologicalsociety.org vicepresident@coastgeologicalsociety.org secretary@coastgeologicalsociety.org treasurer@coastgeologicalsociety.org membership@coastgeologicalsociety.org webmaster@coastgeologicalsociety.org

Los Angeles Basin Geological Society www.labgs.org

Contact: Jean Kulla 949-500-3095



Luncheon meetings are held monthly September and October; and January through June, usually on the fourth Thursday of the month, at The Grand 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 \$25 (with reservations), \$30 (without reservations), \$20 for retired members, and \$5 for students. Reservations can be made online at www.labgs.org or by contacting Graham Wilson at 562-326-5278 or GWilson@SHPI.net Reservations must be made prior to Tuesday before the meeting.

President: Vice President Treasurer: Secretary: Scholarships: Jean B. Kulla Katherine Kovac Bert Vogler Graham Wilson Karla Tucker k2mobile@MSN.com kovac_km@yahoo.com hvogler@kleinfelder.com Gwilson@SHPI.net ktkr2@aol.com

Northern California Geological Society	9 Bramblewood Court	Contact: Barb Matz
www.ncgeolsoc.org	Danville, CA 94506-1130	Barbara.Matz@CBIFederalServices.com

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, contact Dan Day at danday94@pacbell.net before the meeting.

Cost is \$5 per regular member; \$1 per student member; and \$1 per K-12 teachers.

(Continued on next page)

NCGS Officers:

President: President-elect: Program Chair: Secretary Treasurer Membership Chair Newsletter Editor Field Trip Coordinator Past President Scholarships

Northwest Energy Association www.nwenergy.us

vacant John Karachewski Dan Day Phil Reed Tom Barry Mark Detterman Tridib Guha Phil Reed Phil Garbutt

Will Schweller

willschweller@yahoo.com vacant cageo@sbcglobal.net danday94@pacbell.net philecreed@yahoo.com tomasbarry@aol.com mdetter1@gmail.com tridibguha@yahoo.com philecreed@yahoo.com plgarbutt@comcast.net

P. O. Box 6679 Contact: Portland, OR 97228-6679 Jim Jackson or John Armentrout

Luncheon meetings are held monthly September through May, on the third Thursday of the month, at the Multnomah Athletic Club (1849 SW. Salmon Street) in Portland, Oregon. Meeting time is at 11:45 AM to 1:00 PM (speaker about 12:15 PM). The cost is \$25 for members and \$30 for non-members. For information or reservations email NWEnergyAssociation@gmail.com, or our Postal Box: Northwest Energy Association, P.O. Box 6679, Portland, Oregon 97228-6679.

President	John Armentrout	jarmenrock@gmail.com
Vice-President	Bill Rodgers	wlrodgers@stoel.com
Past President	Jim Jackson	jackson.js@comcast.net
Treasurer	Barb Portwood	bbportwood@gmail.com
Secretary	Laird Thompson	lbtfracs@gmail.com
House of Delegates:	John Armentrout, Anne Fix	

Sacramento Petroleum Association

P. O. Box 1844 *Contac* Folsom, CA 95630

Contact: Jerry Reedy or Pam Ceccarelli 916.486.2643 916.439.0400



Luncheon meetings held monthly January through November, on the third Wednesday of the month. Location: Club Pheasant Restaurant in West . The meetings starts at noon. The cost is \$16 - \$20. For information or reservations, contact Pam Ceccarelli.

President: Vice-President: Secretary Editor/Treasurer Jerry Reedy David Hartley Derek Jones Pam Ceccarelli JWR5532@aol.com drilmax1@aol.com djones@gasbiz.com pc626@comcast.net

San Joaquin Geological Society www.sanjoaquingeologicalsociety.org P. O. Box 1056 Bakersfield, CA 93302

Contact: Laura Bazeley lbazeley@wziinc.com

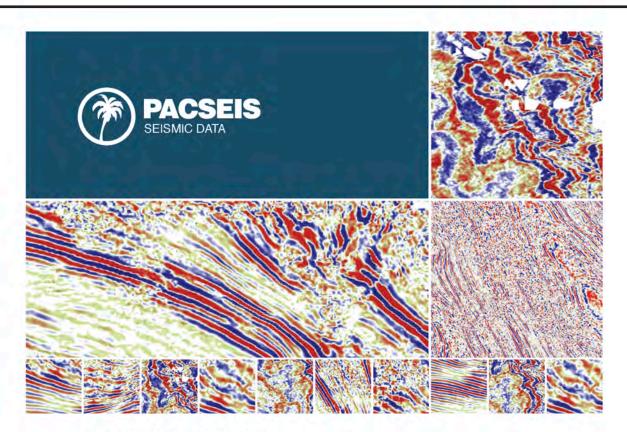


We have dinner meetings on the second Tuesday of the month at the American Legion Hall at 2020 "H Street" in Bakersfield. There is an icebreaker at 6:00 p.m., dinner at 7:00 p.m., and a talk at 8:00 p.m. Dinner is \$25 for members with reservations and \$30.00 for nonmembers and members without reservations. Students may attend for free.

President:	Ariel Auffant	aauffant@chevron.com
Past President:	Anne Draucker	AnneDraucker@chevron.com
President-Elect:	Greg Gordon	gsgordon@aeraenergy.com
Vice-President:	Courtney Marshall	Courtney.Marshall@crc.com
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Treasurer:	Jonathan Goodell	Jonathan.Goodell@crc.com



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