Pacific Petroleum Geology
NEWSLETTER
Pacific Section • American Association of Petroleum Geologists
January & February 2016

2016: A Year for Local Action, Honing Skills and Creating Value.

2015-2016 Officers

Staff

COVER PHOTO:

A double rainbow over the Ventura Harbor. There's always a rainbow after the storm - as noted by President Kurt Neher in his column.
Photo courtesy of Daniel Hopps.

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Dear Pacific Section AAPG Members,

I wish you all a very happy New Year. May 2016 be a wonderful year for all.

It will be easy for many of us in the E&P industry to sweep 2015 into the dustbin of history. The price collapse that began in late 2014 continued through 2015 and left us with prices hovering in mid $30's through December (figure 1). This is not what any of us thought would happen. Recent history (the 2008 price drop) suggested a recovery would not be far off, and we could just hold our breath for a short time. Well, I have gone back to breathing, albeit a bit heavy. We enter 2016 with prices firmly in the $30's and a consensus that any recover will be slow and could begin at the earliest in late 2016. Then again, history has shown that our ability as an industry to predict prices has not been very good.

Even given the overall price climate, 2015 was not a bad year. The PSAAPG Annual Convention held in Oxnard last May was a real success. Attendance was high and the content was truly first class. PSAAPG continued its broad educational and sponsorship programs, and enters 2016 on a sound financial footing. At a larger scale, several legislative efforts to curtail our industry met with defeat. The most notable on the west coast was California Senate Bill 320. In addition, HR 156, the repeal of the ban on oil exports, will allow flexibility in marketing product and will have a long term positive impact across our industry and across the broader US economy. The year concluded with the UN Climate Change Conference in Paris. The Paris Agreement and the continued push to phase out fossil fuels will certainly impact our industry in 2016 and beyond.

As we plunge into 2016, it is becoming clear we will have to live with depressed prices for a while longer. It will be a year of change, and companies and individuals will learn how to thrive and cope in this environment. This is nothing new to our industry. It is creativity, innovation, initiative and sometimes stubbornness that not only gets us through times like these, but helps us recognize unique opportunities that these same times present to us. Our section is characterized by rich, mature hydrocarbon-producing basins, and many of our members work developing fields and exploring for new resources in these provinces. With reduced operational activities and responsibilities, now is the time to focus on subsurface issues. This is what we do as petroleum geoscientists. Always remember that our understanding and perspective of the subsurface geology is the foundation upon which our business is built. Drilling, completions, surface facilities, etc. all depend on and are designed around our understanding of the geology, the reservoirs and the fluids they contain. A former manager of mine always reminded us "It's the geology, knucklehead!" (Of course, we always took this to be a friendly coaxing to keep focused on the geological details of our projects.) While capital budgets are down and all eyes are on cost reduction, let's keep the focus on the geology. Doing what we do better will drive efficiencies and create value, even in this environment.

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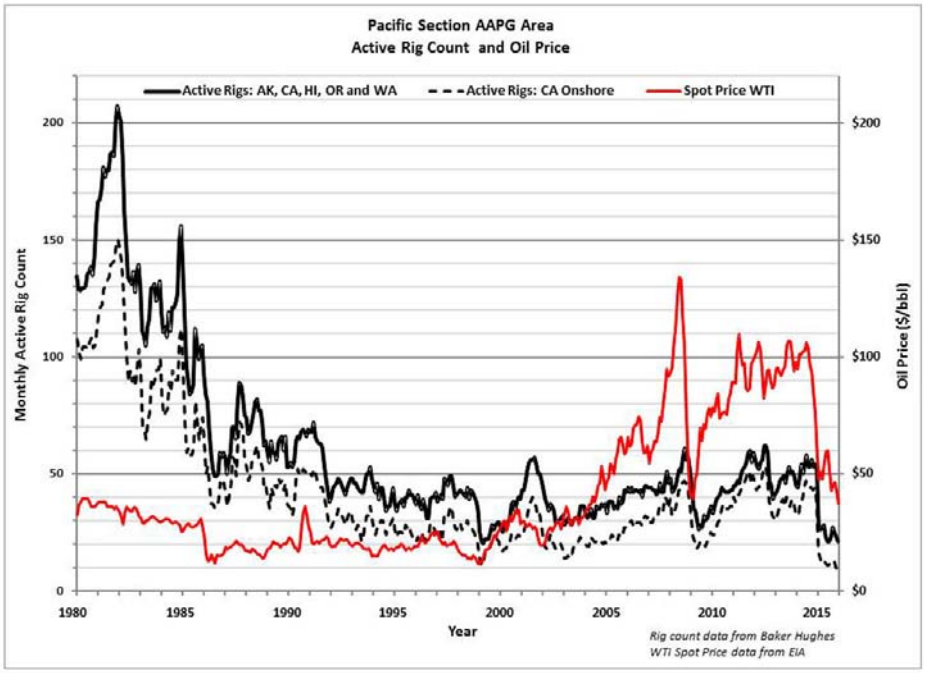


Looking forward, our 2016 Section Convention will take place in Las Vegas in October, and will be a one-of-a-kind event. This will be the first time we team up with our colleagues in Rocky Mountain Section for a joint conference and program. "New Rocks, New Plays, New Days" will offer up a broad program of talks, workshops, courses and field trips. As many of you know, there are many wonderful places in Nevada to see truly world class geology. I hope to see you all there. For those of you in Pac Section that will be unable to make it to Las Vegas, we are working on a Playmaker Forum that would be hosted in Bakersfield earlier in the year. There will be more to come on this in the near future. Always remember, "it's the geology, ….".

Many of us are feeling the impact of the current price environment, and companies, educational institutions and professional societies are suffering from reduced revenue, reduced capital budgets, sponsorships and memberships. As I mentioned last month, AAPG is doing all it can to weather this storm and continue to offer members the most value through its core programs and benefits (and remember, there is always a rainbow at the end of a storm). In his recent AAPG Explorer Column, David Curtiss mentioned that last month 14 members of AAPG headquarters staff elected to retire early. I draw your attention to this because many of these staff members have worked with PSAAPG members and leadership closely over many years. They supported many of our programs and conventions here on the West Coast, and were always available to lend a helping hand when needed. They are our friends and colleagues, and we will miss them. We wish them all the success and good fortune in their future endeavors.

Thank you.
Kurt Neher
PSAAPG President, 2015-2016

Dear friends and colleagues,

Happy New Year!

Recalling the Editors note from the January & February issue 2015, I wrote: "2015 is bound to be an exciting year. With oil prices approaching the $50/barrel, our Young Professionals (YPs) are getting a feel for what many of our seasoned experts have experienced many times in the past". Exciting doe snot begin to describe 2015!

2015 was an especially tough year for the two end members of our community: voluntary retirement packages throughout industry corroding one end while students and YPs have had to find alternative industries to join. A tremendous loss of history and experience and a disheartening wake up for many graduates that were hopeful for the exciting career of an oil finder.

Today, oil prices are hovering in the low $30/barrel range; a number so dismal it would have been almost impossible to imagine a year ago. While we hunker down as an industry, now is a critical time to work on our personal and organizational strengths.

We as geoscientists have a particular advantage, one that will keep us employed even in bad times: we are versatile, trained in diverse disciplines, and most importantly we can solve problems. In our work we are expected to overcome technical, personal and financial difficulties that impact our company, fellow employees and our community. Hard times pass and – faced properly – we emerge a little wiser, with more life experience and new skills.

In terms of a word of encouragment for the YPs, recent grads, and soon-to-grad readers, the petroleum industry is acutely aware of the need to refuel its workforce and despite uncertainty in both gas and oil prices, companies continue to invest in recent graduates. New-hires will continue to fill the shoes of the experienced professionals approaching retirement or whom have recently had no option but to retire. Please keep in mind that there are industries closely aligned with the petroleum industry that eagerly search out and gladly hire earth scientists; The two that immediately come to mind and are key industries in our section are the environmental business and hydrology. Working as a YP in the earth sciences will be a rewarding experience no matter the path.

And as Kurt said; don't forget the rocks! Many recruiters scan your resume for creativity, field experience and ingenuity. In down times like these, volunteer at State or National Parks to write a geology guide, become a field assistant, and take field trips with your local geological societies. When the market turns, you need to be prepared. Demographics are in favor of the new workforce, so find a way to take advantage of the cyclic nature of the job market and plan, dream, sharpen your tools and fight a good fight.

To help you plan, remember strong structures have good foundations:

- Get involved; join professional societies. For students, membership is often free.
- Present your research at geological meetings. It is a great way to show off your technical skills and network.
- Find your skill, market it and follow up on links and contacts.
- Create, commit and challenge yourself.
- Invest in yourself by reading books on people skills, management, interviewing etc.
- Submit papers/articles to the newsletter

The joint PSAAPG-Rocky Mountain Section AAPG in Las Vegas from 2-5 October 2016 will be a perfect opportunity for you to network, take field trips, volunteer and show your work. Please take advantage of this event.

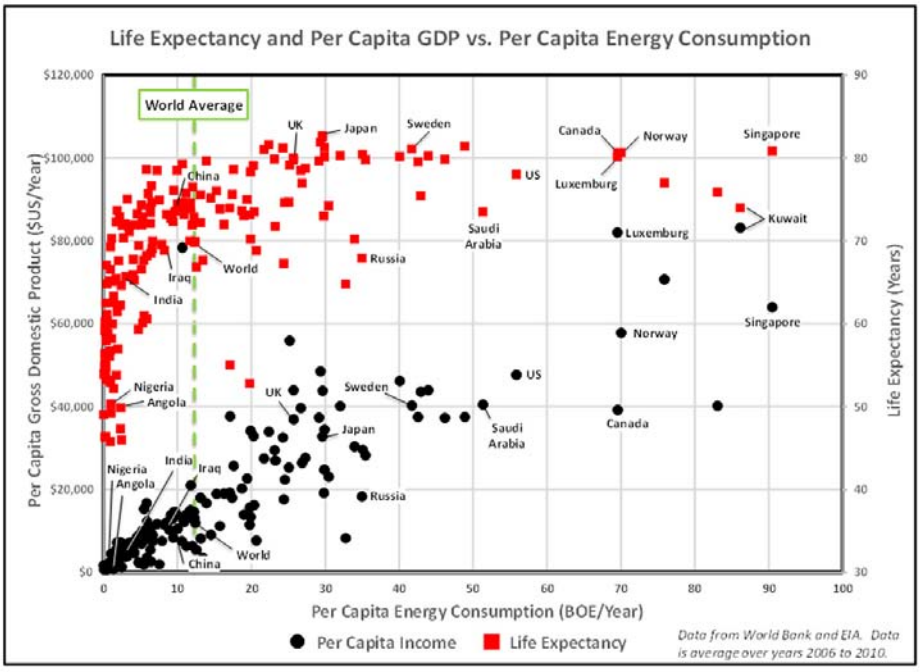
I wish you all a positive and rewarding year,
Vaughn

--- On a sad note, our friend, Harold Sugden, departed this life on 10 January 2016. Harold was a wonderful friend to all of us, PSAAPG and SJGS. He was a wonderful, enthusiastic teacher, geologist and mentor and an integral part of our community. Our hearts are with his family and friends. His memorial column will appear in the next issue of PPG.

Did you know...

There is a strong correlation between a country's energy consumption and both per capita Gross Domestic Product (GDP) and life expectancy? The chart below, generated from data easily accessible on the web from the World Band and EIA, shows a direct correlation between per capita energy consumption and per capita GDP. It is a good measure of a country's standard of living; those to the right generally have, to name a few, more lightbulbs, refrigerators, clean water and time in which to think of more ways to make life better. The life expectancy curve between about 2-20 BOE/yr energy consumption shows the same trend; from a life expectancy in the mid 60's to one of 80 years of age. Below 2 BOE/yr energy consumption, a little energy can make a big difference but may be overshadowed by nutrition, disease, weather, civil unrest and other factors. To the right of 20 BOE/yr energy consumption, we suspect the small variances in life expectancy may be attributed to factors such as diet, life style, stress, population size and so forth.

To help put this information into perspective, we have annotated a number of countries on the chart. One does not have to travel extensively to see that the World's average per capita energy consumption, 12.4 BOE per year per capita, separates two distinct groups of countries with very different standards of living. First, it seems intuitive that countries to the left of the line want to quickly climb the energy use curve. Second, it is understandable why those same countries are resisting the efforts of those countries to the right of the line to limit fossil fuel use for the perceived "benefit" of the World's climate. Lastly, as current worldwide events drive population shifts of the magnitude we have not seen since World War II, it is important to note that people generally move from countries on the left of this chart to countries on the right. At this moment in our history, it is almost exclusively the increased use of fossil fuels that will allow countries, cities, families and individuals to climb the energy use curve and thus improve their standard of living, increasing both the quality and length of their lives.



A Q&A with Terence G. O'Hare, standing for AAPG Vice President Sections

Tell us about yourself:

My name is Terry O'Hare; I am married and the father of two sons and one daughter, my daughter is currently studying geology at UC Boulder!

I was born in Manhattan, New York and raised on Long Island. After High School I attended the University of Kentucky with my twin brother who is also a geologist.

After graduating with a BS in Geology I found myself in Midland, Texas for my first job in the Petroleum Industry. Midland was quite a change from Kentucky and especially New York, but it was a great place to learn the skills of a petroleum geologist.

It was during my first real commodity price bust of 1986 that I decided it would be better to live in Dallas, Texas for business reasons. Currently I still reside in Dallas and am owner of a small exploration company named Emerald Energy, LLC.

When and how did you decide to become a geologist? And why?

My love of geology started during my youth by being fascinated with the variety of rock types (predominantly glacial till) observed while roaming the beach on Long Island. In grade school I received a "rock computer" for a Christmas present which I used to identify the beach samples.

In college my interest was sparked again when I took physical geology freshmen year, I fell in love with the science and have never looked back. My professor had discovered a gold mine in Australia prior to teaching, convincing me you could also earn a living utilizing the geoscience knowledge.

What has been your experience with AAPG?

My first experience with AAPG was in 1998 acting as an alternate delegate on behalf of the Dallas Geological Society. The subsequent year I was asked to be on the investment committee a position I have held for the last fifteen years.

The AAPG activity I am the most proud of is acting as the General Chair for the 2004 ACE Convention held in Dallas; it was a lot of work but a most rewarding experience.

More recently I have been involved with the DPA as its secretary and I continue to be involved with the HOD as a delegate.

What is the main issue facing the profession today?

I have been working in the Petroleum industry for approximately 35 years and have witnessed the cyclic nature of the commodity price and how it affects business activity.

It turns out we are currently experiencing another down cycle after a lengthy period of domestic production increases as a result of using new drilling techniques and completion technologies. Those younger geologists hired over the last four to five years have never experienced a down cycle, while on the board of the DPA we decided to resurrect the pamphlet on "how to become on independent geologist" written by Mr. Jim Gibbs in the late 90's.

This down cycle appears to represent a new paradigm; the effects on the price are more than ever related to overall global economic activity and therefore make price predicting much more complicated.

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There is also a push for greater contribution from the "renewable" resource sector in the form of wind and solar. I think as petroleum geoscientists we have to continue to show the world we can provide our resource in an efficient and environmentally sound manner.

As an industry we must continue to have technology and innovation guide us into the future and I think the AAPG must continue to be the leading source of peer reviewed scientific data related to energy.

How can you help AAPG be a better association?

By addressing the needs of our industry for the next 5-10 years as it relates to this new global economic paradigm. The AAPG has its roots in America but as we have already experienced, input form countries outside of America will continue to expand.

The needs facing both the Sections and Regions will evolve based on activity specific to their environments. In the US the society has to remain informed about new regulations that might hinder a Sections activity. Similarly, the political volatility in some of the regions will continue to be a threat to existing infrastructure and future opportunity.

I see the role of Sections Vice President as a liaison between each Sections leadership and the Executive Committee and would enjoy the opportunity to facilitate an effective communication link..

Why did you agree to stand for office?

In order to be a complete professional you have to get involved in your professional societies on both a local and national level as your career matures.

Many of my most rewarding professional experiences come from my exposure to these volunteer organizations and its members.

I think the time is right for me to take on a bigger role within AAPG so I can assist the membership as we navigate this current cycle' challenges as well as those that face the association into the future.

PROSPECTS THAT HAVE COME BACK TO ME IN MY CAREER # 4 (or is it # 3?): RANDOLPH OIL POOL, SEMITROPIC OIL FIELD, KERN COUNTY, CALIFORNIA

Scott Hector

Would you believe that there are wells in California that have been flowing oil for between 40 and 60 years? Most of you that just read that probably think that (a) I am lying or (b) I have been drinking too much or (c) I just got back from a smoking vacation in Colorado. None of the three are true: the correct answer in a quiz would have been: (d) none of the above. It is the truth!

The oil wells in question make up the oil pool in the Semitropic oil field located in northwestern Kern County, California, some 40 miles northwest of Bakersfield (Figure 1). This field was long known as a gas field, with shallow gas produced from the San Joaquin and Etchegoin formations at depths of 2,000' to about 4,500'. These Pleistocene and Pliocene reservoirs started producing gas in the 1930's, and it was not until the 1950's Exxon found some deeper pay at about 7,500' in the Pliocene Etchegoin that made oil. It was a Humble company in those days, and they made two wells out of three in section 24-T27S-R23E. The "Elizabeth G. Williams" #1 came in at 39 BOPD of 28 gravity oil, the # 2 came in at 98 BOPD of 27.5 gravity oil, and the # 3 well did not come in at all (in other words, it was a dry hole). However, the wells were very minor producers and were not followed up right away. It was not until 20 years later, in 1977, that Ed Green with his company Gary Drilling went on a drilling campaign to find the limits of the field. Geologist Vic Church had showed the play to Ed, and he liked it. When Ed was finished, there were 70 oil wells on 40-acre spacing over an area of 3,000 acres. This drilling proved that the northwest trending anticlinal closure that had trapped the shallow gas sands was much less pronounced at the Randolph level, the closure changed to a flattening on a subtle northwest plunging anticlinal nose. The trap had changed from structural control at shallower depths to more of a stratigraphic trap in the oil pay. Exxon's original wells proved to be at the very eastern edge of the play. In other words, they were humble producers.

I met Ed Green in the late 1980's and worked for him from 1994 to 2000. When I first met him, I was consulting, usually as a mud logger and at times as a petroleum geologist. In the late 1980's Ed was considering selling the Randolph oil pool to get out of future environmental liability. I recommended that he maintain the ownership, but he did not. Later on, in 2000, I went to work for Gotland Oil Company. Lo and behold, they were now the owners of the oil field! In 2002 or 2003, Gotland Oil was sold to Carneros Energy, and I had a job with a new company. The Carneros company was 3D seismic oriented, and had convinced Warburg-Pincus, an investment banking company out of New York, to back them to explore for oil in California. It was true at the time that there had been very little of the San Joaquin Basin shot with 3D, and it is was certainly possible that new fields were waiting to be discovered in that prolific basin. However, despite its corporate plan to be 3D seismic oriented, Carneros Energy did not shoot a 3D survey over Semitropic field. But they did allow several wells to be drilled in late 2004 and early 2005.

I now get to tell you the bad news about the Randolph oil pool. Yes, the wells did flow for decades and are still flowing. However, they never made much oil! The reservoir is very tight and over-pressured, so that is why the wells could come on at rates of 20 to 40 (rarely, up to 100 BOPD) IP and then slowly decline. The 70 wells produced oil that was 28 to 32 API, likely sourced by the Monterey Shale that under lied the sandstone zone. But, the entire oil pool has only made some 3.2 million barrels of oil since inception, which averages to only 45,000 to 50,000 barrels of oil per well.

Carneros Energy needed to know more about this Randolph pool, and they did the science the right way. They concluded that we needed to drill two wells: one that would be a core hole to learn more about the reservoir (the Carneros Energy "Bradford B" # 17 in section 23, now the Vintage Production #17-33-23N) and another well drilled with oil-based mud to see if we could improve the drill time to get down to almost 8,000 feet drill depth for the relatively modest amount of oil that these wells could produce (the Carneros Energy "Supreme" #7 in section 14-T27S-R23E). I chose a location for the core hole that would be a 20-acre offset to the best well in the field (the nearby "Bradford" #14 well had made 140,000 barrels of oil). The other well was chosen in a poor producing area of the field, but on a lease that had a very low royalty burden (oddly, named the Supreme lease despite poor production performance).

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The main question about the drilling of these wells was whether or not the field had been properly produced and drilled up already. I remember one of our petroleum engineers arguing vehemently that this drilling would be a failure and that we would only find depleted reservoirs with little or no pressure left. There were two zones of "porous" (not really) and "permeable" (not really) rock in the Etchegoin oil reservoir. The Upper Randolph did not look as good on the logs as the Lower Randolph, which had more S.P. response and resistivity response than the upper one (please see the Type Log, Figure 2). It was said by the personnel against drilling that almost all of the oil was coming out of the Lower Randolph and that thus the volume of rock was less than theorized and a depleted zone would be found by the new drilling.

The results of the core hole exonerated my position. At depths of 7,400' to about 7,900' across the oil zones, we measured pressures of over 5,000 psi! These pressures showed that 20-acre infill drilling within the field would work. We were able to core both the Upper and Lower Randolph zones. The rock was so finely laminated that we had to bring in special equipment to Omni Labs in Bakersfield to measure the permeability (using a technique that used helium blown into the rock to measure the properties, and done over each 1/10 of a foot of the core). The average over the cores was 22% porosity but an average permeability of only 10 to 15 millidarcies. The highest readings were in the 200 to 300 millidarcy range. However, there were a lot of values of "less than 0.1 mdcy". Photographs of the core showed then many of the zones of pay were less than one foot in thickness. Furthermore, there were come odd balls of cement in some of the photos that did not have any petroleum reflection in the black light, even though they were surrounded by oil saturated sands and silts.

Feldspathic arenite. That was the name of the reservoir rock derived from our data. The core data showed that in addition to this call, that the rock was highly bioturbated. I saw a lot of evidence of this in the photographs of the core. One picture I just love looks like a tornado in the rock, but is actually a burrow of a shrimp or similar animal that was backfilled with different dirt after it was dug (probably clay within sandstone), causing a distinct difference in color of the sample. I had Al Almgren look at the cores, and he said that it looked to him the rock had likely been laid down in a lagoon (i.e., paludal).

The data we gathered on the reservoir was interesting. However, we were a bit taken aback when the head of lab doing the testing for Omni Labs in Houston, Melanie Dunn, called and said, "I received some core samples from your well today, but there must be some mistake. You need to send me the core of the reservoir". To this question I had so say "Sorry, but you are looking at it".

I am sure that by now you are waiting with baited breath to hear the oil production results. You had better be sitting down! Despite the finding of the high pressure, the core hole did not work well. It came on for a few dozen barrels of oil a day (35 BOPD of 30.7 API gravity oil on the DOGGR history), and produced for about half a year, and then the casing split (or at least that was the story, although the DOGGR history disputes that)! The well could not be fixed and had to be abandoned. The second well, the mineral oil well, was drilled much quicker, cutting some 4 days or so off of the drill time (drilled to 8,077' in about 9 days). However, since the well was drilled in a rather poor part of the field, the well did not exceed the results of those around it. It did not perform well, and after a short time on production it also was abandoned. Sadly, both of these vertical wells had also been frac'd, with each having a frac in the Upper and the Lower Randolph (each frac about 100,000 #'s of 20/40 Ottawa sand and staged in at 2 to 8 ppg). So, I could not argue that the wells did poorly because they had not been frac'd. They had been.

However, all was not lost. I left Carneros Energy in 2005, but obtained permission from the former management to give these results at a convention (Mr. John Rainwater and Mr. Mickey Weisinger were working for Pacific Energy Resources, the company that bought Carneros Energy and gave me permission to share data on the field. Pacific Energy Resources later sold to Vintage California Production, LLC). Mike Johns and Brian Cunningham were co-authors, and we won the award for the best oral presentation at that year's (2008) Pacific Section AAPG convention. The title or our talk was: *"The Randolph Oil Zone, Semitropic Oil Field, Kern County, CA: A Highly Bioturbated, High-Pressure, Low Permeability Reservoir in the Lower Etchegoin".* Always being self-deprecating, I was concerned that there might have been a mistake in the vote tallying: I had given three talks at that convention, and might they not have added up my scores from the three and thought it was for one talk? Anyway, no one asked for a recount, so I gladly accepted the award (the A.I. Levorsen Memorial Award for the Pacific Section AAPG).

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Well, I just checked the DOGGR website for Semitropic oil field and found out that a number of horizontal wells had been drilled since 2005. One, the Vintage Production "Supreme" 14-8H in section 14 had been horizontally drilled into about a half of a mile of the Lower Randolph. However, the well only came in for about 87 barrels of oil per day. This 2011 well, had a total depth of 10,676' and a true vertical depth of 7,604'.

Production at the Semitropic oil field appears to be relatively steady, but not booming as I might have expected if there were successful horizontal wells in the Randolph. Of course, for those of you that frequent the site, you know that the last complete annual report on the site is from 2009. I cannot find a "conventional" annual report for any year after that but they do have preliminary reports for 2012, 2013 and 2014! For 2015, I had to go into the monthly reports and add them up to get any trend. The DOGGR had reported 43,624 barrels of oil from the Randolph oil zone in 2012, 38,312 barrels in 2013, and 40,063 barrels in 2014. I then added up the monthly reports for 2015 and tallied up 20,830 barrels of oil and only 18,177 barrels of water, from a total of 49 producing wells (the DOGGR reports that 22 Randolph zone wells are presently shut-in). This is still a marked improvement over the 32,431 barrels reported in 2009.

In a separate item, I understand that a 3D seismic survey has finally been shot over the Semitropic field. I hope that it will reveal deeper prospects beneath the field. However, even if it does not do that, at least it should reveal to the interpreters how the Monterey oil found its way into the Randolph reservoir. Did the "kitchen" feed the "reservoir" vertically or horizontally? Anyway, it looks like there is a lot of life left in Semitropic oil field, despite the fact that the old wells have flowed for 50 to 70 years (and now are down to an average daily production rate of between 1 barrel and 2 barrels a day). Long live Semitropic!

Scott T. Hector
VP Sacramento Petroleum Association

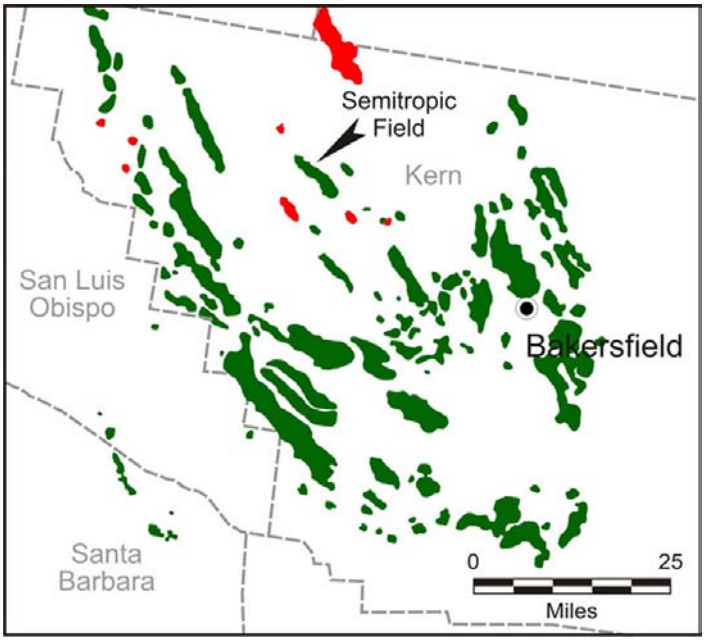

Fig. 1. Semitropic oil field located in northwestern Kern County, California, some 40 miles northwest of Bakersfield.

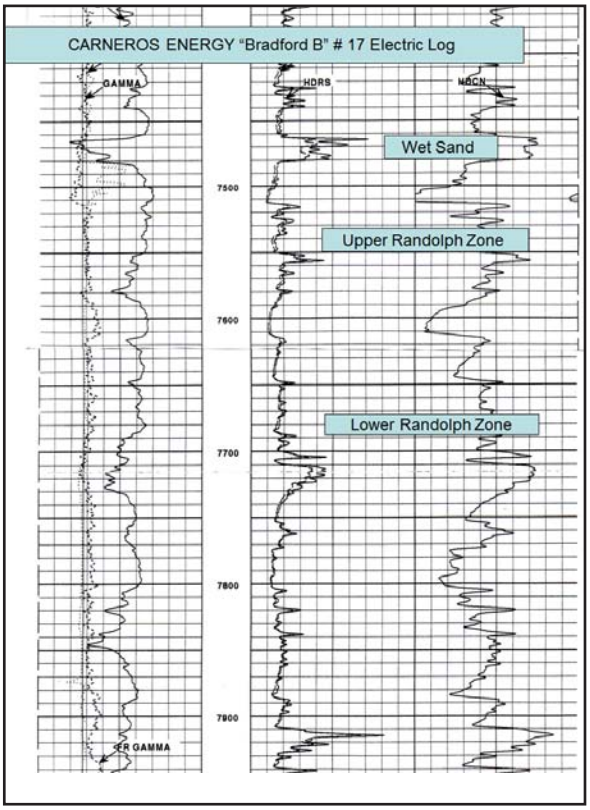

Fig. 2. Type log of the Upper and Lower Randolph zones.

GOVERNOR BROWN ISSUES STATEMENT ON DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES SUPERVISOR STEVEN BOHLEN'S RETURN TO LAWRENCE LIVERMORE NATIONAL LABORATORY

SACRAMENTO – Governor Edmund G. Brown Jr. today issued the following statement on California Department of Conservation Division of Oil, Gas and Geothermal Resources supervisor Steven Bohlen's plans to return to the Lawrence Livermore National Laboratory. Bohlen will also continue to assist the Administration as an unpaid science advisor to the Division.

"Steve brought strong leadership and valuable scientific expertise to the job of improving oil and gas oversight," said Governor Brown. "California will benefit from his continued service as an unpaid advisor to the Division, even as he returns to scientific and national security work at the Lawrence Livermore National Laboratory."

Steven Bohlen was appointed supervisor in May 2014 with the assignment to conduct a full, systematic analysis of the division and a comprehensive plan for organizational change. During his tenure, the Division released a Renewal Plan for Oil and Gas Regulation, which refocuses the Division on its core values to regulate the oil and gas industry with safety and environmental health as top priorities. Bohlen has been on loan from the Lawrence Berkeley National Laboratory over the past 18 months and brought considerable technical experience to the Division, including experience with ocean drilling, geology and academic research. In his capacity as an unpaid science advisor, Bohlen will continue to assist the Division on oil and gas issues, including the ongoing development of underground injection regulations.

The Governor also announced today that Ken Harris, 59, of Davis, has been appointed supervisor of the California Department of Conservation Division of Oil, Gas and Geothermal Resources. Harris has been the executive officer for the Central Coast Regional Water Quality Control Board since 2012. He held multiple positions at the State Water Resources Control Board from 1987 to 2012 including assistant deputy director, supervising engineering geologist, assistant director and senior engineering geologist. Harris was interim assistant executive officer for the Los Angeles Regional Water Quality Control Board from 2010 to 2011 and a staff geologist at the San Lorenzo Valley Water District from 1983 to 1984. He earned a Master of Science degree in hydrology from the New Mexico Institute of Mining and Technology. This position does not require Senate confirmation and the compensation is $198,500. Harris is a Democrat.

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SPRING 2016 !

You did NOT miss It
It was NOT cancelled
Only Postponed - It is….*

"THE WOOLLEY"

17th ANNUAL CGS

GOLF TOURNAMENT & BBQ

Friday, May 6, 2016

* This classic event has been rescheduled in Spring to avoid Santa Ana winds, El Nino floods, the Big One, and to better inspire and align with the CGS May Scholarship Awards. See you there !!

JOHN WOOLLEY
C G S
MEMORIAL
GOLF TOURNAMENT

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AAPG
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NEW PLAYS, NEW WAYS, NEW DAYS

> SAVE THE DATE !

for the first ever joint meeting of AAPG's Pacific + Rocky Mountain Sections & take advantage of many technical & social opportunities in America's favorite convention city.

2-5 OCTOBER 2016
PARIS LAS VEGAS HOTEL

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www.aapgrms.org

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.

January 28th, 2016. 11:30 am
Speaker: Julia Wellner, University of Houston, Houston, TX (AAPG Distinguished Lecturer)
"Marine Geological Record of Ice Retreat in the Antarctic Peninsula since the Last Glacial Maximum"

Coast Geological Society

Meetings are held at the Poinsettia Pavillion, 3451 Foothill Road, Ventura, CA 93003.
The social hour starts around 6:00pm, dinner is served at 7:00pm and the presentation starts just before 8:00pm.

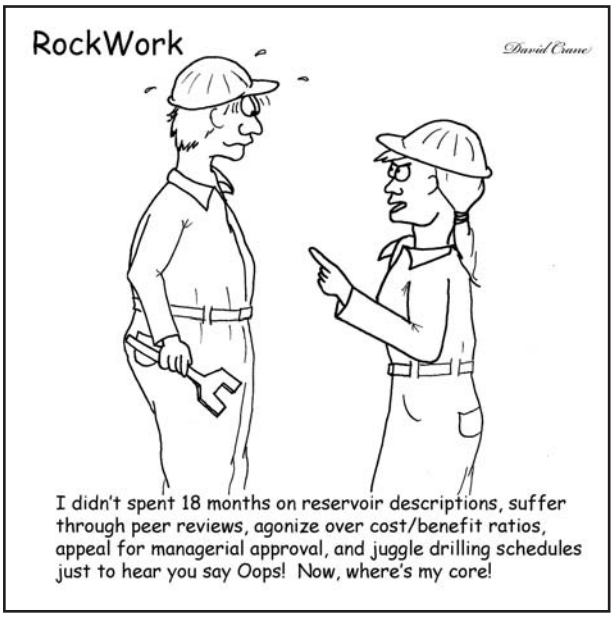
January 19th, 2016
Speaker: Dr. David Valentine (UCSB)
"Oil and Gas Seeps Offshore California – New Technologies Yield New Insights"

February 16th, 2016
Speaker: Dr. Robert Gaines (Pomona College)
"A Remarkable New Fossil Assemblage from the Burgess Shale and the Early History of Complex Life on Earth"

L.A. Basin Geological Society

Meetings are generally held on the fourth Thursday
of each month at the Grand at Willow Street Conference Center,
4101 East Willow Street, Long Beach.

January 28, 2016. 11:30 am
Speaker: Donald Prothero, Ph.D.
"Evolutionary Non-Response to Climate Change
in Rancho La Brea Mammals and Birds"



Northern California Geological Society

Meeting topics work in progress.

Northwest Energy Association

January 21, 2016
Speaker: John Ewert, USGS
"Volcanic Eruption impact on Energy Infrastructure"

Sacramento Petroleum Association

February 19th, 2016
Speaker: Roland Bain
"Review of Drilling Activities and Highlights in the Sacramento Valley for 2015"

SPA is always looking for speakers so please contact any of the SPA officers to schedule your presentation. Luncheon meetings are held every third Wednesday of the month (except December) at the Club Pheasant in West Sacramento.

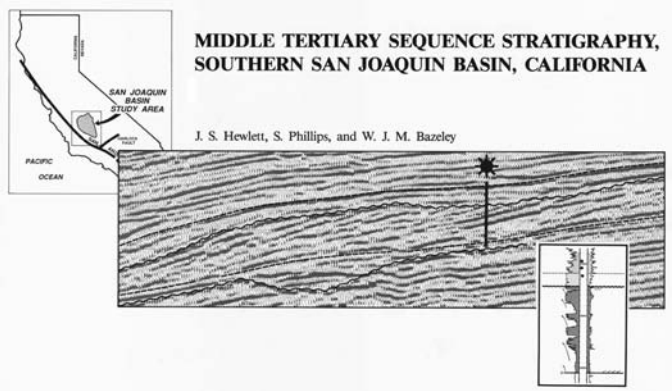
(Continued on next page)

San Joaquin Geological Society

January 12th, 2015
Speaker: John Wakabayashi, Professor at Cal State Fresno
"The Franciscan Complex"

LOCATION CHANGE: The new dinner meeting location is the Eagle's Lodge at 1718 17th Street, Bakersfield, CA 93302. Talk announcements to follow soon.

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.

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:	Monte Mabry	monte.mabry at bp.com
President-Elect:	Chad Hults	chadcph at gmail.com
Vice-President:	Steve Wright	vp at alaskageology.org
Secretary:	Dave Buthman	dbuthman at hilcorp.com
Treasurer:	Heather Heusser	heather.heusser at alaska.gov
Past-President:	Keith Torrance	keith.torrance at uicumiaq.com

Coast Geological Society

www.coastgeologicalsociety.org

P. O. Box 3055
Ventura, CA 93006

Contact: Bonnie Walters
805-795-9898

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 Eric White (secretary@coastgeologicalsociety.org), and should be made by 4:00 p.m. on the Friday before the meeting.

President:	Bonnie Walters	president@coastgeologicalsociety.org
Past President:	Bob Blackmur	pastpresident@coastgeologicalsociety.org
Vice President:	Alastair Haddow	vicepresident@coastgeologicalsociety.org
Secretary:	Eric White	secretary@coastgeologicalsociety.org
Treasurer:	Theresa Heirshberg	treasurer@coastgeologicalsociety.org
Membership chair:	Nick Kunstek	membership@coastgeologicalsociety.org
Webmaster/Tech Support:	Whit Skaling	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:	Jean B. Kulla	k2mobile@MSN.com
Vice President	Jacqueline Chavez	Jacqueline.Chavez@crc.com
Treasurer:	Bert Vogler	hvogler@kleinfelder.com
Secretary:	Graham Wilson	Gwilson@SHPI.net
Scholarships:	Karla Tucker	ktkr2@aol.com

Northern California Geological Society

www.ncgeolsoc.org

9 Bramblewood Court
Danville, CA 94506-1130

Contact: Mark Sorensen
msorensen64@earthlink.net

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:	Will Schweller	willschweller@yahoo.com
President-elect:	vacant	vacant
Program Chair:	John Karachewski	cageo@sbcglobal.net
Secretary	Dan Day	danday94@pacbell.net
Treasurer	Phil Reed	philecreed@yahoo.com
Membership Chair	Tom Barry	tomasbarry@aol.com
Newsletter Editor	Mark Detterman	mdetter1@gmail.com
Field Trip Coordinator	Tridib Guha	tridibguha@yahoo.com
Past President	Phil Reed	philecreed@yahoo.com
Scholarships	Phil Garbutt	plgarbutt@comcast.net

Northwest Energy Association

www.nwenergy.us

P. O. Box 6679
Portland, OR 97228-6679

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

Sacramento Petroleum Association

P. O. Box 1844
Folsom, CA 95630

Contact: Jerry Reedy 916-486-2643 or Pam Ceccarelli 916-439-0400

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

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

San Joaquin Geological Society

www.sanjoaquingeologicalsociety.org

P. O. Box 1056
Bakersfield, CA 93302

Contact: Beckie Burston BeckieBurston@chevron.com

We have dinner meetings on the second Tuesday of the month at the Eagle's Lodge at 1718 17th Street, Bakersfield, CA 93302. 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
Secretary:	Beckie Burston	BeckieBurston@chevron.com
Treasurer:	Jonathan Goodell	Jonathan.Goodell@crc.com

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