



# West Coast Driller

A Publication of the West Coast American Association of Drilling Engineers

P.O. Box 9953, Bakersfield, CA 93389

[www.aade.org](http://www.aade.org)

October 2003

## A.A.D.E. Monthly Technical Forum

Thursday, October 16th, 2003

**Speaker:** Dr. Peter Malin, Duke University

**Topic:** Parkfield & Mammoth  
Seismology and Earthquake Studies

**Location:** The NEW Bakersfield  
Petroleum Club

**Time:** 5:30 Social Hour  
6:30 Dinner  
7:00 Presentation

**Cost:** \$20 if RSVP by COB Wed., 10/15  
\$25 if after

**RSVP:** Patti Holliday @ 334-3600 or  
Email: [Patti.Holliday@Halliburton.com](mailto:Patti.Holliday@Halliburton.com)

*\$50.00 Door Prize For Those Who  
RSVP and Attend!*

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## From the President

Thanks to all who attended the first Technical Dinner Meeting featuring Steve Matthews with his overview of the *Ensign Automatic Drilling Rig*. We had 54 in attendance, with 24 new and renewed memberships.

Most of the feedback we have received regarding the Petroleum Club's effort to host our September event has been positive. We recognize that the audio and video piece could be better and will rearrange this month's set up so you can see and hear the presentation better. All future dinner meetings (following October's) will be held in the main "banquet room", as was done last season.

Dr. Peter Malin from Duke University will speak on October 16<sup>th</sup> about tectonics and the impact on oil

production. This subject is guaranteed to be interesting, since we work in one of the more "tectonically active" areas in the world (AKA as EARTHQUAKES). Be sure to RSVP early with Patti Holliday @ 334-3600 or <mailto:patti.holliday@halliburton.com>

The Fall Sporting Clay shoot is planned for December 5<sup>th</sup>, so mark your calendars. Expect registration notices to go out the beginning of November.

We didn't get a chance to recognize Weldon Sons at September's technical meeting, as Weldon was having knee surgery. We wish our long time board member a speedy recovery, and will catch him for the October 16<sup>th</sup>

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## News Briefs

The September meeting is history and we are preparing for October. The subject turned out to be excellent and we want to express our gratitude to Steve Matthews for making the presentation and to Gene Gaz for getting it set up. There seems to be a lot of interest in the Automated Drilling Rig (ADR) here in the Valley. Thanks again to Steve and Gene.

The October forum is scheduled to have Dr. Peter Malin here to discuss Tectonics and how they relate to our business. Since we live in an area so prone to earthquakes, this should be a very interesting subject for our meeting.

You should be getting the registration form for the Sporting Clay Shoot on December 5<sup>th</sup> soon, so start getting your team together. There will be two times to shoot, so you can be thinking about which time you will prefer to shoot, either early or late. The first one will start at 8:30 A.M. and the second at 10:30 A.M. The first 20 teams to sign up and get their money in will get first choice for the late time, everyone else will have to take the early time. So if you want the late time, get your forms in as soon as you get it.

How many of you guys know how the oilfield determined that 42 gallons was the number of gallons to comprise an oilfield barrel? After reading this newsletter, you can see the technical analysis involved in arriving at this number. If you have any articles that would be of interest to our members, I would be happy to hear from you. [bfrench@geodf.com](mailto:bfrench@geodf.com)

Bob French

## From the President

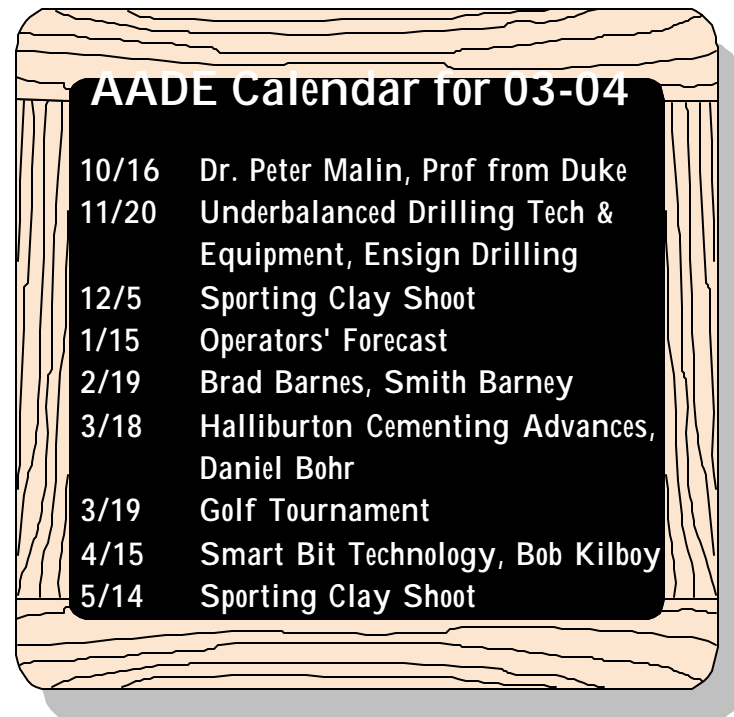
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technical meeting. We will also give Jim Fox a hearty thanks for his service as last season's AADE President.

Again, the Board of Directors works for you and asks that you submit any comments or opportunities for improvement to [mikemollere@chevrontexaco.com](mailto:mikemollere@chevrontexaco.com), or any board member.

Looking forward to seeing you on October 16<sup>th</sup>.

Mike Mollere



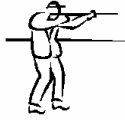
The calendar is presented in a wooden frame with a black background and white text. The title 'AADE Calendar for 03-04' is at the top. The events are listed with dates and descriptions.

AADE Calendar for 03-04	
10/16	Dr. Peter Malin, Prof from Duke
11/20	Underbalanced Drilling Tech & Equipment, Ensign Drilling
12/5	Sporting Clay Shoot
1/15	Operators' Forecast
2/19	Brad Barnes, Smith Barney
3/18	Halliburton Cementing Advances, Daniel Bohr
3/19	Golf Tournament
4/15	Smart Bit Technology, Bob Kilboy
5/14	Sporting Clay Shoot

**This schedule is tentative and may be subject to change.**

# 1st Annual Desk and Derrick Sporting Clays Shoot

## "THE DUSTER"



**5 Dogs Range - First 30 Teams Will Shoot  
Friday, November 7<sup>th</sup>, 2003  
Check-in 8:30am ; Shoot Starts @ 10am  
Please be there EARLY to start on time  
Entry Fee Is \$340.00/TEAM**

**PRIZES for 1ST, 2ND AND 3RD PLACES – ALL HANDICAPPED;  
PRIZES for LOW GROSS and HIGH GROSS**

**STEAK LUNCH and SOFT DRINKS PROVIDED after the SHOOT – WE WILL BE  
RAFFLING OFF A SPORTING CLAYS SHOTGUN!!!! – Other Raffle  
Prizes would be GREATLY appreciated!!!**

**PROCEEDS TO GO FOR SCHOLARSHIPS!!!!  
RESPOND EARLY & DON'T MISS OUT!**

**CAPTAIN: \_\_\_\_\_ PH.# \_\_\_\_\_**

**Shooter 2: \_\_\_\_\_**

**Shooter 3: \_\_\_\_\_**

**Shooter 4: \_\_\_\_\_**

**Station Sponsor - \$100.00/each - \$ \_\_\_\_\_**

**MAKE CHECKS OUT TO "DESK and DERRICK" OR USE CREDIT CARD AND SUPPLY  
INFORMATION IN THE SPACE PROVIDED - ENTRY DEADLINE IS OCTOBER 31<sup>st</sup>**

**Return Entries to: Steve Lewallen/Halliburton Energy Services  
5060 California Ave., #300, Bakersfield, CA 93309**

**Questions? – Call Patti Holliday or Steve Lewallen at 661-334-3600**

**CREDIT CARD(VISA, MC): \_\_\_\_\_**

**CREDIT CARD #: \_\_\_\_\_**

**EXPIRATION DATE : \_\_\_\_\_ SIGNATURE : \_\_\_\_\_**

**TOTAL AMOUNT : \$ \_\_\_\_\_**

## Lucky Member of the Month

### Joe Kandle

Joe Kandle, the current President of Tri-Valley Oil & Gas Co., started his oilfield career 38-years ago with then what was called Socony-Mobil after having graduated from the Montana School of Mines with a B.S. degree in Petroleum Engineering. Joe was initially employed as a Production/Drilling Engineer working out of Mobil's Santa Fe Springs office working Santa Maria, Ventura and the LA Basin fields. Within several years Joe's drilling engineering efforts worked him into becoming more and more associated with Mobil's wildcat drilling wells. In 1971 Joe was the primary drilling engineer on his first 15,000' test in Kern County. In 1972, Joe was on what turned out to be a 20,753' wildcat well – the Mobil-Tupman USL #1-10. In 1973, Joe was hired by a very aggressive independent at that point – Great Basins Petroleum Co. where he then handled the engineering and field supervision on the Great Basins/Tenneco 31X-10, a 21640' wildcat, which was then the deepest test ever having drilled in California. In 1974, Joe was then on what became a record setting well in Northern California outside of Woodland, California which drilled to 18,275', the Cache Creek #1.

In 1974, Joe was promoted to Chief Engineer for Great Basins Petroleum Company. Great Basins, at the time, drilled wells and was involved in operations throughout the US including West Virginia, Colorado, Texas, etc. In 1976 Joe was promoted to Vice-President of Engineering, a position he held until 1981, at the height of the "oil boom", wherein he moved to Bakersfield to be with an upstart independent – Star Resources. In 1983, the upstart stumbled, thanks to the Penn Square Bank debacle in Oklahoma, and for the next 11 years Joe found a home with Atlantic Oil Company in Bakersfield, an independent with its own fleet of 11-drilling rigs, production rigs, pumpers, and field crews. Within one year, Joe was promoted to Vice-President, a position he held until 1994.

Starting in July of 1994, Joe was in the consulting ranks working for a multitude of companies until 1996 when he took a full time position, again, with a second start-up company – R & R Resources where he remained until July of 1998 when he was approached and accepted employment with Tri-Valley Oil & Gas Co. becoming Vice-President of Engineering. In February 1999, Joe was promoted to President of Tri-Valley Oil & Gas Co.

And now, you know the "rest of the story" of Joe Kandle.

## HOW MUCH IS A BARREL OF PETROLEUM?

Adapted from an article by Sizes, Inc. [http://www.sizes.com/units/barrel\\_petr.htm#ft1](http://www.sizes.com/units/barrel_petr.htm#ft1)

The “barrel” used to measure petroleum, crude oil, petroleum products and drilling fluids, hasn’t been an actual barrel since the late 19<sup>th</sup> century. The barrel was originally 42 US gallons (about 159 liters) of petroleum. It originated during the Pennsylvania oil rush following Drake’s discovery well in 1859. The exact origins are somewhat obscure.

Some sources site the forty-two gallon barrel which was one-sixth of the 252-gallon *tun*, a well-known size long before Drake’s well, as the origin of the 42 gallon barrel. It is the same size as the English *tierce* of wine prior to 1824, and of the American *cran* of herrings.



Photo courtesy Drake Well Museum

The earliest documentation from the oil fields, however, speaks mostly of 40-gallon barrels, not 42, and the report in February 1866 of a federal commission appointed to look into taxing oil gave all its statistics in 40-gallon barrels.

The oil producers were desperate for containers and would have used any liquid-tight barrel they could lay their hands on. Records and photographs show barrels in a variety of sizes.

Where did they get so many 40-gallon barrels that it became a temporary standard? The 40-gallon barrel is peculiar to the state of Virginia. An act of 23 February, 1631-32, ordained that “a barrel of corn should contain 5 bushels Winchester measure”, which is 40 gallons. Later on 18 February, 1819 the state declared that “a barrel of salt contained 5 bushels” (or 40

wine gallons; the US gallon is based on the English wine gallon).

In *Derrick’s Hand Book* the following entry for 31 August 1866 is found: “The Register says the oil producers have issued the following circular: ‘Whereas, It is conceded by all producers of crude petroleum on Oil Creek that the present system of selling oil by the barrel, without regard to the size, is injurious to the oil trade, alike to the buyer and seller, as buyers with an ordinary size barrel cannot compete with those with large ones. We, therefore, mutually agree and bind ourselves that from this date we will sell no crude by the barrel or package, but by the gallon only. An allowance of two gallons will be made on the gauge of each and every 40 gallons in favor of the buyer.’”

So in 1866 producers stopped measuring their product by the barrel and just counted how many gallons they were selling. When changing from real 40 gallon barrels to theoretical 42 gallon barrels the producers gave the extra 2 gallons to their customers so they wouldn’t feel like they were being cheated.

While oil was still being shipped from the Pennsylvania oil fields in barrels, drums, wooden boxes and open barges it was now being measured and sold by the 42 gallon barrel.

When the basis on which a commodity is measured changes, it is not uncommon for sellers to give buyers a bit extra to allay the buyers’ apprehensions, and sometimes these allowances become frozen into the value of a unit. By 1872, the 42-gallon barrel seems to have become firmly established: “At a session of the Council of Producers, the following resolution was passed: ‘Whereas, False reports have been circulating in the eastern markets to the effect that the producers intend starting their wells again at once; Resolved, ... that we will have \$5 per bbl. of 42 gallons for our crude oil.’” This was an early effort to stabilize prices by restricting production as OPEC does today.



# AMERICAN ASSOCIATION OF DRILLING ENGINEERS

## MEMBERSHIP APPLICATION

DATE: \_\_\_\_\_

Chapter Affiliation *(please check one of the following)*:

Dallas/ Fort Worth	Houston	Lafayette	New Orleans	West Coast	Denver	Permian Basin	Mid- Continent	Anchorage Alaska
\$15.00	\$20.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$25.00	\$15.00

Last Name	First Name	MI
Company	Title	Business Phone
Address		Fax
City	St.	Zip Code
		E-Mail Address

Business Type: *(Please circle one)*  
 (10) Oil and Gas Producer (20) Engineering/Operations Consulting (30) Environmental (40) Equipment/Service Supply Company  
 (50) Consumable Product/Service Supply Company (60) Drilling Contractor (70) Governmental or Regulatory Agency (80) Other

Job Function: *(Please circle one)*  
 (A) Management (B) Engineering (C) Operations (D) Technical Support/Service (E) Research and Development  
 (F) Field Service/Technician (G) Training (H) Purchasing (I) Marketing/Sales (J) Other

**MEMBERSHIP  
YEAR**

AADE FORM No. 020 (8/94) Rev. 04/02/2003

Member No. \_\_\_\_\_

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