



Newsletter

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FROM THE DIRECTOR'S DESK...

Winter, or what passed for Winter in these parts, is giving way to Spring, which means it is time for PTTC's Appalachian basin Regional Lead Organization to begin a new round of PTTC Focused Technology Workshops. As I write this, we have contracted for four new workshops in Ohio, Kentucky and West Virginia, and are in the process of evaluating several other offers. This evaluation is being done by a 3-person PAG (Producer Advisory Group)

committee under the leadership of Joe Frantz.

The new workshop committee is one of six PAG committees organized following a PAG meeting in January. Other committees will examine and evaluate our website, annual and future planning, nominations and public relations, the feasibility of a basin-wide oil and gas data base and a partnership between our local PTTC and the new PUMP (Preferred Upstream Management

Practices) effort. During this same meeting, your regional PAG elected two new members and re-elected four veterans to three-year terms. I am pleased to welcome our new members, and Bernie Miller as our new PAG Chairman, which automatically gives Bernie a seat on the National Board of Directors.

The National Board of Directors met with the Regional Lead Organization Directors and PTTC Headquarters staff in Washington in early February to discuss a White Paper that outlines a 10-year plan for PTTC. This is a critical issue,

because the current contract is set to expire at the end of April 2003. Without an extension, or a new contract, this DOE-funded program will end in 13 short months. So, if you have gotten used to seeing us around, and would like us to continue, feel free to do what we did in January: visit your Congressmen on the Hill and tell them how much value you have received from the PTTC effort in the basin.

Doug Patchen
RLO Director

PRODUCER ADVISORY GROUP HOLDS ELECTIONS

Outgoing Chairman Kevin Smith convened a meeting of the Producer Advisory Group (PAG) at the National Research Center for Coal and Energy on January 22 to hold new elections and discuss other matters of business. Four veteran PAG members were elected to new 3-year terms (January 2002 - December 2004): Tommy Cate, Bill Daugherty, Rivers Ford and Dave Wozniak. In addition, Thomas E. Stewart, Executive Vice President of the Ohio Oil & Gas Association, and Kent Schamp, Eastern Manager of Development for the Energy Corporation of America, were elected as

new members.

The six new members join 12 holdover members with either one or two years remaining on their current terms. Those whose terms expire at the end of 2002 include Kevin Smith, Roger Willis, Royal Watts, Art Van Tyne, Bernie Miller and Bill Goodwin. Unfortunately, within a few days after the meeting, Kevin Smith had to resign his position on the PAG after several years of faithful service. We will miss him.

The six members whose terms expire at the end of 2003 are Greg

Mason, Steve Nance, Brad Gill, Joe Frantz, Rick Goings and Mike Herron. Feel free to contact any of these members with your

suggestions and concerns. Contact information is available on this web site.

TRENTON-BLACK RIVER WORKSHOPS SCHEDULED FOR OHIO AND KENTUCKY

The Ohio Geological Society and the Ohio Department of Natural Resources, Division of Geological Survey, have teamed to develop a workshop on “Exploration and Development of the Trenton-Black River of the Appalachian Basin” for April 25, 2002 at the Four Points by Sheraton in Canton, Ohio. The goal of the workshop is to provide a comprehensive look at the Trenton-Black River Play in the Appalachian basin from the perspective of those who have been actively involved in the play’s exploration and development.

Coordinators Larry Wickstrom and Bill Rike have released a tentative list of speakers and topics, which includes a play overview by Lee Avary; possible Grenville influence on reservoir development by Richard Beardsley; exploration and development in northeastern Ohio by Bill Grubaugh and Pete McKenzie; current drilling practices by Jim Weekley; seismic acquisition and processing by Tom McGovern; seismic

character of the reservoirs by Alan Leaver; optimal logging and imaging suites by Jay Terry; well test, production data and reserve evaluation methods by Ken Brown; and the current West Virginia oil and gas law for deep wells by Brett Loflin.

For further information go to our calendar page for a link to the workshop description and registration form.

On June 4th, David Harris and the Kentucky Geological Survey will host “Outcrop Analogs for Trenton-Black River Fractured Dolomite Reservoirs: a Field Trip and Core Workshop in Central Kentucky” at the survey’s core and sample repository in Lexington, Kentucky. Specific topics will include Ordovician stratigraphy and lithologies; types and models of hydrothermal mineralization in central Kentucky; relationship of mineralization to hydrocarbon emplacement; characteristics of hydrothermal dolomite; relationship to faulting and analogies with subsurface reservoirs in New York and possibly

West Virginia; and expression of basement faults in Ordovician carbonates.

For more information, contact

Dave Harris at the Kentucky Geological Survey, or refer to our calendar of events on this website.

GAS STORAGE WORKSHOP TO BE HELD IN MAY

Lee Avary, Head of the Oil and Gas Program at the West Virginia Geological Survey, is developing a workshop on gas storage that will be offered May 29th at the NRCCE Building in Morgantown. At present, she hopes to emphasize new projects in New York, Pennsylvania, West Virginia and Illinois, some of which are current DOE-funded research efforts. Well bore remediation and damage evaluation

are other topics of concern, as is gas storage safety. Finally, gas storage from the perspective of various organizations, such as the Potential Gas Committee, the Gas Technology Institute or the Cambridge Institute are possibilities.

Please refer to our calendar link for further details as this workshop program is developed.

WVU GEOLOGY PROFESSOR RECEIVES LARGE SOFTWARE DONATION

Houston-based Seismic Micro-Technology has donated their Kingdom Suite seismic software package to Dr. Thomas E. Wilson and the Department of Geology and Geography at West Virginia University. The software, valued at more than \$700,000, will allow graduate students in geophysics be more prepared to enter the petroleum industry upon graduation. Kingdom Suite and similar software packages have become standards

in the oil and gas industry. In addition, the software will be helpful in obtaining research grants for the department.

Dr. Wilson stated that his involvement with PTTC was helpful in securing this large donation. During the early years of the PTTC program, Dr. Wilson organized an annual Seismic workshop in Morgantown that was always well attended. Seismic Micro-

Technology (SMT) was invited to come to one of these to demonstrate their product, and ended up asking Wilson to write a primer to help industry learn how to use the software. SMT was so impressed with the primer that they have not only referred to it themselves, but have asked that it be updated. In return, SMT made the recent donation of an

updated version of Kingdom Suite.

The software will be used in the departments computer lab, where up to 26 computers can access it at one time. Dr. Wilson is considering developing a workshop to demonstrate the software to the local oil and gas industry, if SMT is willing for him to do so.

OIL PRODUCERS CITE TECHNICAL PROBLEMS AND NEEDS

Appalachian basin oil producers recently cited the current technical problems they face and their needs for new technology and assistance during a workshop in Morgantown on January 22. The workshop on “Problem and Preferred Management Practices Identification” was organized to introduce selected members of the Appalachian basin oil industry to a new DOE-funded program called PUMP, for Preferred Upstream Management Practices. Invited guests heard a description of the new program in the Appalachian basin, as well as an excellent keynote address by Virginia Lazenby, Chairman of the Bretagne Group, and seven short papers that described technology options for oil producers.

During the afternoon, workshop

participants were divided into three breakout groups to discuss the use, needs, automation and management of oil data; reservoir characterization, heterogeneity and compartmentalization; and drilling, completion and stimulation practices.

One group concluded that digital oil and gas data in a standard format for all Appalachian basin states is highly desirable, and that oil field personnel should be trained and educated to give them an appreciation for data and its importance. The reservoir group identified the need to be able to isolate zones to determine productive units, to model the reservoir and to integrate data of different types from diverse sources. The group also found that it is vital to be able to access data in company files and reports, and in government reports, but

first it may be necessary to verify if and where these data exist, and then to integrate them into a useful database.

Drill rig safety and a knowledge of safe drilling practices was the most important recommendation of the third breakout group, which again underscored

the need for better training of oil field personnel. Potential solutions offered include developing a well control or well safety school, and a workshop on best drilling practices. It was suggested that PTTC could develop and host both workshops.

HORIZONTAL DRILLING WORKSHOPS WELL RECEIVED

Comments received from participants in two horizontal drilling workshops indicate that these workshops were among the most informative and best presented of all of our PTTC workshops, which now number more than 60 over a 7-year period. Both workshops were presented by Bob Knoll, of Maurer Technology, in November and December. Together the workshops covered approximately half of the material that Knoll usually covers in a four-day, higher cost version that will be offered this year in two locations (see our calendar of

events).

The actual workshop title used by the instructor is “Optimized Exploitation Technology,” a topic that covers more than just horizontal drilling. However, in the two days of material presented in Delaware, Ohio and Washington, Pennsylvania, the focus was on an introduction to horizontal drilling, directional drilling guidance and geo-steering, and wellbore stability, completions and multi branch configurations.

INTEGRATING GIS AND GPS FOR THE PETROLEUM INDUSTRY

Brandon Nuttall and the Kentucky Geological Survey will host a workshop designed to ensure that features in the field (e.g., well heads) can be located using available map information, and once located that they can be accurately plotted on a map while still in the field. Economic handheld global positioning system (GPS) receivers can assist in these tasks. The proposed workshop will provide an introduction to using and integrating GPS data with geographic information system (GIS) software for mapping and navigation.

Participants will learn how to: use the GPS to determine locations according to suggested best practices; transfer GPS data between the receiver and a personal computer; incorporate GPS data into a GIS system; and load location data into a

GPS for navigation.

The workshop will use Garmin GPS receivers and computer interface cables, ArcView and free software available on the Web. A limited number of GPS receivers will be available for registrants to use in the workshop, but participants are encouraged, but not required, to bring their own GPS receivers.

Use of this software does not imply that either the workshop instructor or PTTC endorses or recommends any of the software or hardware selected for workshop instruction.

For further information contact Brandon Nuttall, bnuttall@kgs.mm.uky.edu, or by calling 859-257-5500.

COMET AVAILABLE FOR APPALACHIAN BASIN STUDENTS?

PTTC's West Coast Region has developed an excellent program designed to instruct highly-motivated high school juniors and seniors and college freshmen in entrepreneurial opportunities and a

career in energy-related industries. This oil and gas industry outreach program is sponsored by private companies and organizations and the public sector (Southern Cal) and combines oil and gas

industry expertise with a high school science mentoring program. In the past, it has been set up to allow five high school teachers and up to 30 students to participate after surviving a highly competitive selection process. However, West Coast Director Dr. Iraj Ershaghi has invited up to two students from each of the other nine PTTC regions to attend. These students must be selected through the same process as the California-base students.

Students who are selected will attend an introductory petroleum education program focusing on oil and gas technology. This five-day training program will be held on the campus of Southern California in Los Angeles from June 23 - 28, 2002. In addition to learning about oil and gas, students will learn to focus their computer skills on programs of interest to oil and gas companies and related agencies, and will visit actual field operations.

Following the training session, the students will return home where they may be given the opportunity to complete a four-week paid student internship, working with a sponsoring organization or company, where an assigned mentor will work with them to train them to fulfill the requirements of the job and orient them to the industry workplace. However, for this to occur in any of the nine regions outside of California,

industry must be willing to participate.

Students selected for this program will receive five-day, on-campus training with free room and board, plus all classroom materials. In addition, if an industry sponsor can be found in their home area, the student can then work for four weeks as a paid intern. Teachers selected for the program will receive their own five-day, on-campus training with the option for free room and board and a \$300 stipend.

Application forms for both students and teachers are available on the West Coast PTTC web site (www.westcoastpttc.org/COMET2002/comet2002.html). Application must be submitted by April 30, 2002.

For further information call 213-740-8076, or e-mail pttc@usc.edu.

Appalachian-based companies who are interested in participating are requested to contact Doug Patchen at 304-594-2331, or e-mail dpatch@wvunrcce.nrcce.wvu.edu. If a company is aware of a highly-motivated student in their area, the company is encouraged to recruit this student, have them apply for the program, and then offer them a funded internship upon graduation. The Appalachian basin RLO may be able to reimburse travel costs for the students to fly to Los Angeles and back.

PTTC'S 10-YEAR VISION

At the request of DOE, Don Duttlinger, PTTC's Executive Director, has submitted a White Paper outlining PTTC's 10-year vision. Although the details of the document cannot be released until DOE has completed their review, it is important for industry to realize that all of us involved in the PTTC program are fully dedicated to making this a long-term, on-going enterprise for the continued benefit of the domestic oil

and gas industry, especially the independent producers.

Your input in the process is important. If you truly believe that you receive value from this program, please take the opportunity to express your views to DOE. Their concern is how to fund the program in the future, so feel free to suggest how you feel this can best be done in the near and mid-range future.

FINDING A DINOSAUR

On a lighter note, I would like to reprint an interesting story that proves that anyone of us can find a dinosaur if we take the time to look (if only we could find our share of elephants as well). What follows is a story written by Gary Marshall, a high school classmate of mine, and two friends who accompanied them on a two-week trip with nomads in the Gobi Desert.

“There we were, just the three of us, bent over at our waists, eyes scanning the parched ground, inching our way down a crumbling gulch in a scorching-hot, blinding-white sandstone escarpment

in the Gobi Desert. A relentless blistering sun hung in a brilliant blue sky overhead – the bluest blue you will ever see. It was hot. And it was dry. So dry that we didn't even sweat in the 100 degree temperature.

There we were – the three of us from Cornell: Joe Compton ('41), Gary Marshall ('64) and Shel Severinghaus ('62). What were we doing? Well, what else does one do in the Gobi at mid-day in August? Of course, shuffle along bent at the waist looking for 70-million year old dinosaurs who just might be lying around somewhere for want of anything better to do. Gary had brought a shovel from our

vehicle, so the three of us were ready for bear, or rather, dinosaur.

In a few minutes, Joe spotted what appeared to be some bone chips lying on the sandy surface of the gulch. Might they be the remains of a dinosaur? And how do you tell the bone of a dead dinosaur from a dead goat or sheep which litter the Gobi anyway? Easy – you do the “taste test.” Touch the bone to your tongue. If it sticks to your tongue, it’s a dinosaur. If it doesn’t, it’s not.

We did the taste test. The bone chips stuck – a bit sandy and not much taste after 70 million years, but they stuck. Shel started brushing off the sand at the surface. He figured if there were so many bone fragments lying on the surface, maybe there were more beneath. Then Gary came in with the shovel, and he began shaving off ever-so-carefully the top layers of sand. Then, we all paused and started using our fingers very delicately to dig deeper.

We noticed the sand in the area where we were digging was greyish in color but in surrounding areas it was white. Strange. Then, all of a sudden, our fingers hit something hard in the grey sand. And it wasn’t a rock. Well, the three of us lay down on our sides on the sand around our 3-ft diameter excavation site, just like the paleontologists do in the National Geographic documentaries. We kept brushing and scraping away and blowing at the sand around the object to expose it. Gradually a leg bone emerged from the sand. And it stuck to our

tongues. Have you ever kissed a dinosaur?

We kept excavating with our fingers, following the grey sand and trying to see where that one leg bone might lead. Judy Gordon joined us in the middle of the dig to assist. It was brutally hot at mid-day in the Gobi when the three of found the leg bone, but I don’t think any of us noticed it. We were sure we were on to something, and we were totally oblivious to our surroundings. Then another leg bone began to appear. More gentle excavating with our fingers and moving the sandy debris to the side in a small mound led to a widening pit. Shortly after that, good grief! A rib cage emerged (a rib cage with ribs!!!), and then shortly after that the pelvis revealed itself. Everything passed the taste test. We were thrilled, exhilarated. It was a dinosaur.

Yes, the three of us are adults. We admit that. Yet it’s hard to describe. During those moments of discovery, we felt like kids playing in a huge natural sandbox with real dinosaurs. We were lying on this scorching, sandy gulch uncovering a wonderful creature, a creature which no human had ever seen alive and which was 70 million years old.

This was no scary and ferocious T. Rex like you see in the movies. It was a humble Protoceratops dinosaur, as identified by Chimed, the experienced, robust and colorful Mongolian paleontologist who accompanied us on this adventure. Protoceratops was the

first of a genus of small dinosaurs with horns on its forehead. It was the size of a sheep. This species had only one horn on its forehead (hence the name “Proto”). It had a long tail, short legs and walked close to the ground. Chimed drew a picture of it in the sand for us. Later species on this genus (including one in the US) had two or three horns on the forehead.

We were not complaining about finding such a small creature. The three of us had found our own little one-horned dinosaur and were enthralled with the discovery and the whole process of discovery.

We didn’t have the time to excavate our whole dinosaur, so in the end, we buried it again, perhaps for another 70 million years, in the parched, dry and scorching sandstone escarpment

in the Gobi, with the relentless sun above. In some ways, it was a bit sad. It was like saying farewell to an old friend. And, indeed, our friend was old!”

It must be a good year for finding dinosaurs. Last week at the AAPG meeting in Houston I went to the evening event at a local museum, and was reading about a small, 3-foot dinosaur displayed in front of me when Don Clarke, a geologist from California, came up and said that he had recently found one just like it. He had been on a field trip and saw what appeared to be a tooth lying on the sand. When he tried to pick it up, he found it was attached -- to a jaw bone. He eventually uncovered the whole thing, and unlike my friend Gary, who didn’t have a plane ticket for Protoceratops, Don was able to take the whole thing home.