President’s Column

As I gather my thoughts to write what will be my final letter to you as President of PBS-SEPM, I realize it has been a strange and stressful year from the standpoint of crude oil prices. We have seen a record high of $147 in July 2008, a low of $35 in December 2008, and a current price of around $80/bbl. To say it’s been a wild ride is an understatement! Yet despite the huge oscillation in commodity prices and the uncertainty it brought to our geologic community, PBS-SEPM not only survived—it thrived. How is this possible you ask?

The success or failure of any non-profit society relies on the sum of the efforts of the volunteers willing to sacrifice their time and talents for the greater good. This past year, PBS-SEPM had two of the most successful educational programs of our entire 55 year history because of the dedicated efforts of its Chairpersons, Board Members, and other volunteers. And if that weren’t enough, these and other initiatives have placed PBS-SEPM in the best financial shape of its entire history as well. Allow me the honor of highlighting several of the volunteers who have done so much to bring us to where we are today. Robert Nail lined up an excellent series of luncheon talks (including a core workshop) of which many had record turnouts. Teri McGuigan’s creativity and innovation brought in a record number of corporate and individual sponsors for the society. Hollie Lamb took the lead in organizing the extremely successful full-day core workshop many of you attended a few weeks ago. Volunteers like Bob Trentham and Emily Stoudt worked closely with Teri McGuigan, Rachel Aisner, and Debbie Gann to run a field trip last June that turned out to be the most successful field trip in our society’s history (a trip we are offering again June 12-15). Erin Van Evera and Cathie Party pulled off a minor miracle by putting together our 2nd Annual Geology of West Texas calendar on a very aggressive deadline—a calendar so popular that all 150 were sold.

These are but a few of the highlights of how your fellow members have contributed to our society this year. I wish I had more space to thank them all!

Two more things you can be proud of. First, in an effort to reach out to the next generation of geoscientists, PBS-SEPM offered discounts to full-time geology students to enable them to participate in our educational events. I’m happy to say that over a dozen students took advantage of these opportunities from schools such as Texas Tech, UTPB, and even as far away as UT Arlington. Second, PBS-SEPM established the Robert L. Read, Jr., Distinguished Lecture Series to bring speakers of excellence to Midland for years to come.

It is time for me to say farewell, but know that it has been a joy to be your President this past year and an honor to work alongside such talented and dedicated people. They deserve all the credit for our society’s success. Please take the time to thank them for their service.

Cory L. Hoffman, Ph.D., P.G.
President PBS-SEPM 2008-2009
http://www.pbs-sepm.org

Mark Your Calendars!

MAY

• 15: PBS-SEPM election ballots due!
• 19: PBS-SEPM Annual Meeting—Presentation of Awards, Election Results, and Luncheon Talk:
• 25: Memorial Day

JUNE

• 15: PBS-SEPM election ballots due!
• 19: PBS-SEPM Annual Meeting—Presentation of Awards, Election Results, and Luncheon Talk:
• 25: Memorial Day

Katherine Giles, Ph.D., “Tracking the Migration of Salt Diapirs using Halokinetic Sequence Stratigraphy” (Midland Center; 11:30-1:00 PM)

JUNE

• 27: Last day to register for Summer Intern / New-Hire Field Trip (June 12-15)

JUNE

• 12-15: Summer Intern / New-Hire Field Trip
PBS-SEPM Executive Board (2008-2009)

President: Cory L. Hoffman  choffman@stmaryland.com
President Elect: Fred Behnken  Fred_Behnken@kindermorgan.com
First Vice President: Hollie Lamb  h.lamb@eaglerockenergy.com
Second Vice President: Teri McGuigan  tmguigan1@suddenlink.net
Treasurer: Deb S. Gann  Debbie.Gann@arcadis-us.com
Secretary: James L. Hawkins  jhawkins@midland.oilfield.slb.com
Executive Director: Paula Mitchell  wrgs@wtgs.org

Do you have an idea for an interesting luncheon talk? Have a core workshop you’d like to present? Have some suggestions on how PBS-SEPM can better serve the geologic community? Just click on the e-mail above and drop us a note—your PBS-SEPM Executive Board would love to hear from you!

Corporate Sponsorships (2008-2009)

If you are interested in a sponsorship opportunity, please call Paula Mitchell for more details at (432) 683-1573.

PBS-SEPM is grateful for the generosity of these fine corporate sponsors!
**PBS-SEPM Luncheon Talk: May 19th**

**TITLE:** Tracking the Migration of Salt Diapirs using Halokinetic Sequence Stratigraphy

**SPEAKER:** Katherine Giles, Ph.D. (Professor, New Mexico State University)

**ABSTRACT:**

The progressive migration of diapiric salt bodies can be interpreted using stratal and structural relationships present in the sedimentary packages that surround them. Distinctive near-diapir growth strata packages associated with vertically moving passive diapirs are referred to as “halokinetic sequences”. Halokinetic sequences are angular unconformity bounded, growth-stratal packages that form due to temporal variations in relief over passively rising diapirs. These stratal packages document the dynamic interplay between salt movement and adjacent sedimentation.

Two end-member types of halokinetic sequences (Hook and Wedge) have been recognized on outcrop in the shelfal strata of La Popa salt basin, Mexico. The types differ in depositional facies, maximum degree of internal folding, amount of fault reactivation on unconformities, overall sedimentation rate, and distance of halokinetic sequence termination from the salt/sediment interface. Hook sequences are associated with periods of overall very low sediment accumulation rates typical of marine transgression on the shelf. They contain basal, diapir-derived debris flows encased in outer shelf fine-grained sandstones deposited by hyperpycnal flows that are abruptly overlain by outer shelf black shales. These strata are locally tightly folded with truncation angles of up to 90° at sequence boundaries. Sequence boundaries show significant fault reactivation during later halokinesis and evidence of brittle shear. Hook sequences terminate directly against the diapir. Wedge sequences are associated with periods of moderately high sediment accumulation rates typical of marine regression on the shelf. They contain basal, lower shoreface sandstone that shallow upward to tidal and lagoonal sandstone. These strata display minimal folding with truncation angles that are <15°. There is little or no reactivation of the sequence boundaries during later halokinesis. Wedge diapir-proximal sequence terminations are spatially separated from the diapir by an average of 250m.

Both styles of halokinetic sequences are seen on seismic lines and can be used to “fingerprint” the fluctuating conditions present near the diapir during migration. The characteristics of the two types of sequences and their stratal arrangement into composite sequences have important implications for reservoir quality, geometry, continuity, and charge potential in diapir-related traps.

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**BIOGRAPHY: Katherine Giles, Ph.D.**

Katherine received her B.S. from the University of Wisconsin (1981), M.S. from the University of Iowa (1985), and Ph.D. from the University of Arizona (1991). She worked as a Senior Carbonate Research Scientist for Exxon Production Research Company in Houston, TX, for two years (1991-1993) before becoming an Assistant Professor at New Mexico State University in 1993. In 1998, she became the Director of the Institute of Tectonic Studies at NMSU, and in 2003 became a Professor at NMSU.

Katherine has authored and co-authored over 30 scientific papers and 50 abstracts. Her professional interests include carbonate sedimentology and stratigraphy with a special emphasis on the stratigraphic response of sediments to tectonic processes.
2009 PBS-SEPM New Hire/Summer Intern Field Trip

2009 PBS-SEPM New Hire and Summer Intern Field Trip
(June 12th—15th)
REGISTRATION FORM

The Permian Basin Section of SEPM is planning a four-day field trip to the Guadalupe Mountains for engineering, land, and geology professionals in June 2009. This is an exceptional opportunity for companies to expose their interns and new hires to world-class outcrops that are direct analogues to producing fields in the Permian Basin. The trip will be led by Dr. Robert Trentham and Dr. Emily Stoudt from The University of Texas of the Permian Basin, who have a combined 55 years experience in research, exploration, and production in the basin. Morning outcrop studies will cover shelf to basin deposits, and will be supplemented with afternoon exercises on sequence stratigraphy, log correlation, seismic interpretation, and production data analysis. The goal of this field trip is to educate participants in combining outcrop data with industry exploration and production techniques from a multi-disciplinary perspective.

Participants will leave Midland on June 12th and will be staying at the Stevens Inn in Carlsbad, NM. Included in the costs: round trip transportation from Midland, three nights lodging, three breakfasts, three lunches, refreshments in the field, guidebook and handouts.

Registration forms will also be available on the PBS-SEPM website (www.pbs-sepm.org) in February 2009. Registration deadline is May 27th.

Limited space is available, so the first to register will be given priority!

COST (please mark appropriately): $700.00 double ( ) $800.00 single ( )

Discipline (Mark One): Geologist ( ) Land Professional ( ) Engineer ( )

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Company/Affiliation:____________________________________________________

Mailing Address:________________________________________________________

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Email: _________________________________________________________________

Roommate: ____________________________________________________________

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Order forms/payment may be mailed to: PBS-SEPM, P.O. Box 1595, Midland, Texas 79702. Phone (432) 683-1573.
PBS-SEPM Core Location Project

Help Us Help You Find That Core!

In mature petroleum provinces such as the Permian Basin, one of the most valuable and underutilized tools for enhanced reservoir characterization and additional hydrocarbon recovery is core from the producing interval. Most of us have encountered the very common problem of finding out that cores were taken from wells important to our projects, but having no idea whether these cores still exist, where they are located if they do exist, and who to contact about viewing them if they are found.

To address this problem, PBS-SEPM has formed a committee to identify core storage facilities, find out what individual operators have done with their cores, and compile search and access information for the various facilities and operators. We have made a start (see PORTALS TO INFORMATION next page, but now we need to ask your help.

These are our goals:

- Compile a list of public and commercial core storage facilities, as well as existing portals into core inventories
- Request that the Society’s members contribute their knowledge about where cores are located, particularly if they know what the various operators have done with their cores
- Research all locations and operators for contact information, method of searching for specific cores at each site (online database, etc.), and some estimate of how much Permian Basin material is at each site.
- Publish the information and post it on the Society’s website
- Cooperate with other efforts related to geologic data preservation, including AAPG’s Preservation of Geoscience Data committee and the National Geological and Geophysical Data Preservation Program of the USGS.

—— David Orchard, chairman PBS-SEPM Core Location Committee
PBS-SEPM Core Location Project (Cont.)

The following lists of portals and storage facilities represent our first results (click on links).

<table>
<thead>
<tr>
<th>PORTALS TO INFORMATION</th>
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<tbody>
<tr>
<td><strong>PTTC</strong> has a portal to the holdings of several public repositories. You can sort by repository and display their holdings in map view. <a href="http://inside.mines.edu/Research/PTTC/Core%20Locator/">http://inside.mines.edu/Research/PTTC/Core%20Locator/</a></td>
</tr>
<tr>
<td><strong>AGI</strong> has a list of repositories of various geologic data, including cores. It provides contact information and accesses data through a map interface. <a href="http://www.agiweb.org/ngdrs/overview/datadirectory.html">http://www.agiweb.org/ngdrs/overview/datadirectory.html</a></td>
</tr>
<tr>
<td>Tony Troutman's website <a href="http://www.carbonates.us/cores.htm">http://www.carbonates.us/cores.htm</a> has a list of storage sites, including several state repositories.</td>
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</table>

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<tr>
<th>PUBLIC AND COMMERCIAL STORAGE FACILITIES</th>
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</thead>
<tbody>
<tr>
<td>The <strong>USGS</strong> has a storage facility in Denver that has Permian Basin material. Their collection can be searched online at <a href="http://geology.cr.usgs.gov/crc/">http://geology.cr.usgs.gov/crc/</a>. 303-202-4851.</td>
</tr>
<tr>
<td>The <strong>Bureau of Economic Geology (BEG)</strong> holds Permian Basin cores in their Midland, Houston, and Austin facilities. See <a href="http://www.beg.utexas.edu/facilities.php">http://www.beg.utexas.edu/facilities.php</a> for information and contacts. Their catalog is called <strong>IGOR</strong> which has a link on above address. IGOR will be replaced soon by a more advanced database.</td>
</tr>
<tr>
<td><strong>New Mexico Bureau of Geology and Mineral Resources</strong> has Permian Basin cores in Socorro. Request a list of the collection at <a href="http://geoinfo.nmt.edu/libraries/subsurface/home.html">http://geoinfo.nmt.edu/libraries/subsurface/home.html</a></td>
</tr>
<tr>
<td><strong>CEED</strong> (Center for Energy and Economic Diversification) at <strong>UT Permian Basin</strong> (<a href="http://ceed.utpb.edu/">http://ceed.utpb.edu/</a>) has Texas and New Mexico cores. 432-552-2020.</td>
</tr>
<tr>
<td>The <strong>International Sample Library at Midland</strong> has cores and core chips. Their collection is not in a database and must be searched through index cards. 707 Connell St, Midland, TX , 79701. 432-682-2682.</td>
</tr>
</tbody>
</table>

**WE NEED YOUR HELP!**

Now we need your help. What do you do when you need to find a core? Do you know of any repositories that aren't in the above list? Do you know what your employer or other operators have done with their core?

Please contribute any such information to this effort by contacting the committee: David M. Orchard, Chair, david.m.orchard@conocophillips.com, 832-486-2314; Dr. Emily Stoudt, stoudte@utpb.edu, 432-552-2244; and Andrew Parker, andrew.parker@whiting.com, 432-686-6784 office.
INTRODUCED BY: Cory L. Hoffman, President PBS-SEPM 2008-2009

SUBJECT: Establishment of Robert L. Read, Jr., Distinguished Lecture Series and Robert L. Read, Jr., Distinguished Lecturer Memorial Fund

WHEREAS, The Permian Basin Section-SEPM is charged in part with promoting the science of geology and disseminating scientific information to the geologic community and general public; and

WHEREAS, The Permian Basin Section-SEPM has no dedicated funds to offset the costs associated with bringing a distinguished lecturer to Midland for the purpose of educating the geologic community and general public on topics of interest; and

WHEREAS, The Permian Basin Section-SEPM is desirous of honoring and memorializing the life, spirit, and contributions of one of its dedicated young members, the late Robert L. Read, Jr., a promising geologist whose life was cut tragically short; and

WHEREAS, The Permian Basin Section-SEPM has discussed this resolution with and received approval from Robert Read, Sr., the representative of the Read family; now, therefore, be it

RESOLVED that the Executive Committee of the Permian Basin Section-SEPM shall appoint a Robert L. Read, Jr., Distinguished Lecture Series Committee (hereafter ‘Lecture Committee’) consisting of three members in good standing, for the purpose of:

1. SELECTING an appropriate distinguished lecturer candidate to come to Midland to speak at the annual Robert L. Read, Jr., Distinguished Lecture Series (hereafter ‘Lecture Series’) for that year.
2. RECOMMENDING that candidate to the Executive Committee for approval by majority vote.
3. BOOKING the distinguished lecturer candidate approved by the Executive Committee.
4. PROVIDING a proper venue for the distinguished lecturer and target audience.
5. DETERMINING the admission fee for members, their spouses, and non-member adult guests to attend the event, subject to Executive Committee approval by majority vote.
6. INVITING surviving members of the Robert Read, Sr., family as special guests of honor.
7. ADVERTISING the annual Lecture Series to the Permian Basin Section-SEPM membership and the general public.

BE IT FURTHER RESOLVED that the Lecture Committee follow these guidelines when selecting a distinguished lecturer:
1. The distinguished lecturer is to be an entertaining and engaging speaker who can reach out to a broad audience (i.e., has a wide appeal).
2. While it is preferable that the distinguished lecturer speak on a topic related to the natural sciences, this is not required.
3. The distinguished lecturer is to speak on a topic appropriate for an adult audience.
4. The goal is to bring in a professional, high-quality, potentially nationally-recognized, informative and exciting speaker that is typically unattainable without paying speaking fees.

BE IT FURTHER RESOLVED that the Robert L. Read, Jr., Distinguished Lecturer Memorial Fund (hereafter ‘Memorial Fund’) be established as a separate money market account or similar low risk, interest-bearing account to be used in the following manner:
1. The Memorial Fund will be used by the appointed Lecture Committee with oversight by the Executive Committee solely for the purpose of covering the following costs associated with this educational event: (1) travel expenses, hotel, speaking fees, and per diem of the distinguished lecturer, (2) room rentals for the event, (3) catering costs, (4) advertising costs, and (5) any other fees or expenses directly associated with this event that the Lecture Committee deems applicable.
2. The Memorial Fund alone will be used to cover all expenses associated with this event, thus protecting the Permian Basin Section-SEPM operating budget from bearing any costs associated with this event.
3. The Memorial Fund need not maintain any minimum balance save that required by the financial institution where it resides.
4. Should the Executive Committee and/or Lecture Committee deem that there are not sufficient funds in the account to properly honor the purpose and spirit of this annual event, the Executive Committee may vote to disband the Lecture Committee and temporarily postpone the Robert L. Read, Jr., Distinguished Lecture Series to the following year in order to accumulate appropriate funding in this account.
BE IT FURTHER RESOLVED that the Lecture Committee follow these guidelines when planning and implementing the annual Lecture Series:

1. An invitation will be extended to the Robert Read, Sr., family at no cost to them.
2. All other attendees (with the exception of the distinguished lecturer) will be charged an admission fee as determined by the Lecture Committee and approved by the Executive Committee by majority vote.
   a. It is suggested that the cost of admission be discounted for Permian Basin Section-SEPM members and their spouses.
3. All members of the Robert Read, Sr., family who wish to attend will be seated at a table of honor along with the distinguished lecturer and any other special guests as deemed appropriate by the Lecture Committee.
4. The Permian Basin Section-SEPM current President, current President Elect, or former President will open the event by explaining the purpose of the Lecture Series, providing a brief history of the Lecture Series, giving a short speech commemorating Robert L. Read, Jr., recognizing any members of the Robert Read, Sr., family in attendance, and introducing the distinguished lecturer.
5. It is suggested that this event be used as a fund-raiser for the Permian Basin Section-SEPM.
   a. All, none, or a portion of the proceeds can be placed back into the Memorial Fund at the discretion of the Executive Committee with the remainder going directly towards the operating budget for the Permian Basin Section-SEPM.
6. A suggested timeframe for this event is in the Fall or Winter in order to avoid competing with other scheduled local events.
7. A suggested venue would be an evening dinner for members, their spouses, and other adult guests.
8. A special gift commemorating the event for the guest lecturer is suggested.
9. At the discretion of the Executive Committee, this event may also include the presentation of the Permian Basin Section-SEPM awards.

BE IT FURTHER RESOLVED that any revision of this resolution must be authorized and approved by the Executive Committee of the Permian Basin Section-SEPM and a representative of the Robert Read, Sr., family. In the event that a representative of the Robert Read, Sr., family cannot be reached despite a good faith effort to do so, the Executive Committee of the Permian Basin Section-SEPM will represent the interests of the Robert Read, Sr., family regarding any revision of this resolution.

WE, the Executive Committee of the Permian Basin Section-SEPM, do hereby certify that the resolution, a copy of which is above set out, was duly adopted and passed by this Executive Committee at a meeting held in Midland, Texas, on the 3rd day of February, 2009.

IN WITNESS WHEREOF, we have hereunto signed our names, on this 17th day of February, 2009.

[SIGNED BY THE FOLLOWING:]

PRESIDENT (Cory L. Hoffman)
FIRST VICE-PRESIDENT (Hollie Lamb)
SECOND VICE-PRESIDENT (Teri McGuigan)
SECRETARY (James Hawkins)
TREASURER (Debrah S. Gann)
EXECUTIVE DIRECTOR (Paula Mitchell)
REPRESENTATIVE OF ROBERT READ, SR., FAMILY (Robert L. Read, Sr.)
This is your opportunity to have the entire PBS-SEPM publication library (1955 – 2007) at your finger tips. There is a fully searchable Table of Contents—find a topic or author just by typing in the word(s). All publications are in Adobe PDF with all major articles being bookmarked, and all the figures are linked in the text for quick reference. Those areas that are off limits to geologists like the Glass Mountains or Sierra Diablos have been written up in these publications. Numerous out-of-print publications and figures and/or plates not published in the original guidebooks are now available in this library.

This includes all publications, even the special publications and coveted core workshops. Can you imagine the hidden treasures you might find? Here is your chance to uncover them in this special three (3) DVD set. Buy one or all.

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Make checks payable to PBS-SEPM.
Please send registration and payment information: PBS-SEPM, P.O. Box 1595, Midland, Texas 79702
For additional information contact: PBS-SEPM office (432) 683-1573.
PBS-SEPM is the Permian Basin Section of SEPM—the Society for Sedimentary Geology. However, you do not need to be a SEPM member or a geologist to join PBS-SEPM.

Our non-profit society relies upon the efforts of dedicated volunteers to serve the geological community—primarily through educational events. These events include monthly luncheon talks, core workshops, annual field trips, and special geological publications. Additionally, we are involved on the college campuses—reaching out to future earth scientists through scholarships, discounted memberships, and offering full-time geology students the ability to participate in professional-grade field trips at little to no cost.

If you would like to join PBS-SEPM, you may visit our website (www.pbs-sepm.org) to learn more about us, download a membership form, and learn how to get involved.


Individual sponsors are advertised on the PBS-SEPM website and each Newsletter. Cost is $85/year. If you are interested in an individual sponsorship opportunity, please call Paula Mitchell for more details at (432) 683-1573.