

# HGS Bulletin Houston Geological Soci

Volume 44 Number 9

**Houston Geological Society** 

May 2002





**HGS International Explorationists Dinner Meeting** by Christopher R. Scotese

see page 13

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Finding, Report on the Study of Well Log Data Management, Phillip C Crouse and Associates, 1998.



Volume 44. Number 9

24

39

45

In Every Issue

From the President

by Paul Hoffman

Remembrances

**HGA/GeoWives** 

**Professional** 

Directory

and Bathymetry of the Late Cretaceous 80 MMYA)

**GeoEvents** 

Calendar



May 2002

#### contents

#### Technical Meetings

**HGS General Dinner Meeting** Thinking "Outside of the Box" —The Role of the Geologist in Meeting Future Energy Demand by Robbie Gries

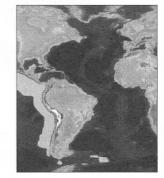


3D Paleogeographic and Plate Tectonic Reconstructions: The PALEOMAP Project is Back in Town by Christopher R. Scotese



Review of Late Jurassic Depositional Systems and Potential Hydrocarbon Plays, Northern Gulf of Mexico Basin by Thomas Ewing

**NeoGeos News** 



page 13

page 7

#### about the cover: Paleobathymetry and topography for the early Miocene are shown in the large background map. The globe displays the Paleo Topography

#### **Houston Geological Society**

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#### Other Events

- **Guest Night at The Houston Museum of Natural Science**
- **6th Annual Summer Technofest**



page 29



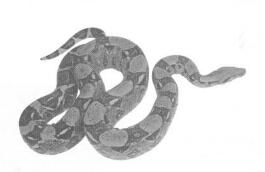
Snake



Jar



Ocean view



16 foot-long adult male red-tailed boa constrictor (*Boa Constrictor Imperator*.) Kills by rapidly squeezing its prey in ever-tightening coils. Non-poisonous, but delivers a painful bite.



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View of *Neptune*, the first major ultra-deepwater subsalt discovery in the Gulf of Mexico, and part of a billion-barrel trend. WesternGeco provided the acquisition, processing, and turning-wave depth imaging that contributed to this discovery.

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## HGS Guest Night at The Houston Museum of Natural Science

Saturday, June 15, 2002

The Wiess Energy Hall
The Wortham IMAX Theatre
featuring a special showing of the NEW IMAX Film,

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with Western Barbeque Buffet Dinner Catered by Ninfa's \$25.00 per person

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6:00-7:00 p.m. Museum doors open, social & browsing hour with cash bar.

Be sure to see the Gem, Mineral, and Seashell Collections and, of

course, the Wiess Energy Hall!

7:00-8:00 p.m. Dining in Museum on Two Levels

8:15-8:45 p.m. Awards Presentations in Museum

9:00-10:00 p.m. Presentation of "Great Journey West-Lewis & Clark" in the

**IMAX** Theatre

The Houston Museum of Natural Science is located in Hermann Park across from Miller Theatre at One Hermann Circle.

#### Registration Form • HGS Guest Night Event

Reservations and payment required by mailing check payable to:

Houston Geological Society—HGS Guest Night Event • 10575 Katy Freeway, Suite 290 • Houston, TX 77024

Call HGS at 713-463-9476 to confirm the receipt of your check. Send your check soon, only 400 seats available!

Refunds available until June 1, 2002. Reserve your space early, because we've sold out each previous year.

No Sales at the door! Admittance by name tag only!

Name:	
Company:	
Work Phone:	
Guest name(s):	



#### Convention Conversation

s I write this, I'm still charged up from the past few days at the AAPG convention. With nearly 7,800 in attendance, this event was the largest in at least the last nine years. As the host society this year, HGS was truly in the spotlight, and once again, the altogether successful outcome of this convention reflects very well on the core strength of the Houston Geological Society, its members.

For those who attended the convention, the rewards are well known—an abundance of opportunities to upgrade our knowledge of our science and our profession, as well as the camaraderie of great people. The convention theme "Our Heritage—Key to Global Discovery" was woven throughout. We heard from Michel T. Halbouty, whose contributions in petroleum exploration and in the arena of public service frame a life profoundly distinguished by accomplishment in all his endeavors. We also listened to a couple of other AAPG members who have done some literally out-of-this-world things—Jim Reilly, a veteran of two space shuttle missions and Harrison "Jack" Schmitt, one of just twelve people who have walked on the moon. These two remind us that exploration frontiers do remain in our time - and that geologists have a role to play in this exploration. We also witnessed an assembly of some of the most successful petroleum prospectors of our time, who shared not just their stories but their spirit. This convention offered wonderful opportunities to augment our education, but at least as important, it virtually radiated inspiration.

A fact perhaps not apparent to most is that the rewards of this convention reach beyond those who attended. First of all, a meeting like this one sustains progress in our science, which trickles down, leading to improved effectiveness and productivity for those of us in the profession. Second, thanks to the hard work and careful planning of many HGS members and of the AAPG convention staff, this meeting generated a good financial return. As the host society, HGS shares in the proceeds. This "non-recurring" income enables HGS to take more dramatic strides than the incremental improvement we must accept with the constraints of a typical operating budget. For example, the proceeds of the last AAPG convention held in Houston made possible a substantial contribution to the North Harris College Geoscience Technology Training Center, which was matched by AAPG. The combined sum allowed the training center to expand and to upgrade computer hardware and software, greatly enhancing its value to the geoscientists of the Houston area. Your Executive Board already has some ideas for the best use of this year's funds, but your input would be welcome. Pass along suggestions to any member of the Board (contact information on page 3).

The phrase "Thanks to the hard work and careful planning of many HGS members ..." appears in the preceding paragraph, but not with enough emphasis! The convention is an enormous enterprise, and these people more than just met the challenge. They deserve to be mentioned. They deserve my thanks and yours. I've listed below the volunteer members of the Convention Coordinating Committee, almost all of whom are HGS members. Please, when you see any of them, let them know that their efforts have been appreciated!

. Thanks

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All materials are due by the 15th of the month, 6 weeks before issue publication. Abstracts should be 500 words or less; extended abstracts up to 1000 words; articles can be any length but brevity is preferred as we have a physical page limit within our current publishing contract. All submissions are subject to editorial review and revision.

<u>Text</u> should be submitted by email as an attached text or Word file or on a clearly labeled diskette in Word format with a hardcopy printout to the Editor.

<u>Figures, maps, diagrams</u>, etc., should be digital files using Adobe Illustrator, Freehand, Canvas or CorelDraw. Files should be saved and submitted in .eps (Adobe Illustrator) format. Send them as separate attachments via email or on a diskette or CD if they are larger than 1 MEG each, accompanied by figure captions that include the file name of the desired image. DO NOT EMBED them into your text document, they must be sent as separate files from the text. DO NOT USE POWERPOINT, CLIP ART or Internet images (72-DPI resolution) as these do not have adequate resolution for the printed page and cannot be accepted. All digital files must have 300-DPI resolution or greater at the approximate size the figure will be printed.

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October 22-25, Albuquerque, New Mexico

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kerry-sublette@utulsa.edu by April 15, 2002. Additional information can be found at http://ipec.ens.utulsa.edu.

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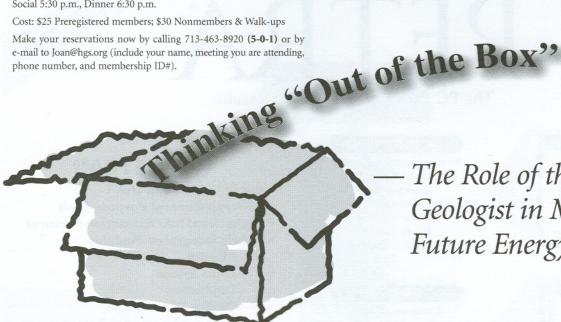
#### **Dinner Meeting**

Westchase Hilton • 9999 Westheimer Social 5:30 p.m., Dinner 6:30 p.m.

Cost: \$25 Preregistered members; \$30 Nonmembers & Walk-ups

Make your reservations now by calling 713-463-8920 (5-0-1) or by e-mail to Joan@hgs.org (include your name, meeting you are attending, phone number, and membership ID#).

by Robbie Gries Priority Oil & Gas, LLC Denver, Colorado



The Role of the Geologist in Meeting Future Energy Demand

#### **Abstract**

The demand for oil and gas in the next century will greatly ▲ increase in the next few decades and reserves are limited. Converting vast amounts of "undiscovered" resources into proven reserves will require geologists "to think out of the box". This means looking at methods no one has tried before, looking for accumulations previously thought unlikely, and looking in places others have overlooked or thought impossible.

This has never been easy, but it has been the key to giant new reserves being developed. Overturning the "dogma" that is currently favored by explorationists with a new "heresy" has a history of difficulty. From the "anticlinal theory" in the 1880s to sequence stratigraphy in the 1980s, geologists have had to persevere to get a new idea tested. Several recent plays that have convincingly converted former "undiscovered resources" into "proven reserves" are basin-centered gas, coal bed methane, and sub-salt exploration. Some older plays, like the early offshore Indonesian exploration, required not only creative geology but also unusual deal making.

Buying reserves or increasing reserves by merging with another company does not discover new oil and gas. Taking the risk to develop a new idea, to finance an unusual idea, and to drill is what will provide the supply needed in the next century.

#### **Biographical Sketch**

ROBBIE GRIES is President of the American Association of Petroleum Geologists. She is founder and President of Priority Oil & Gas LLC, a Denver-based natural gas production, petroleum exploration and development company operating in Kansas, Colorado, and Wyoming. Priority has also been instrumental in

the development of a one million acre "tight gas sand" project onshore in the cross-border region of Ireland and Northern Ireland, where there is no economic production to date. Robbie has been active in the petroleum industry for 28 years, working initially for Texaco, Inc., then Reserve Oil Inc. She has been an independent since 1980. She has combined the business side of oil and gas with her passion for the science of geology, publishing over 30 professional papers. She has developed and published ideas about drilling beneath thrusted Precambrian rocks along the Rocky Mountain uplifts. In the 1980s she pioneered the discovery of a concealed and unexplored Cretaceous basin beneath the San Juan volcanic field in southern Colorado. Robbie is a Director for the Colorado Oil and Gas Association, an Honor Alumnus of Colorado State University and has a Master's degree in geology from The University of Texas at Austin, where she currently serves on the Advisory Council for the Geology Foundation.



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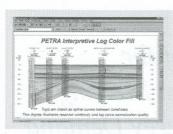
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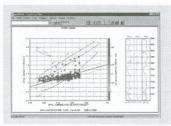
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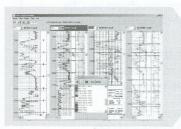
**CONTOUR MAP** 



**BUBBLE MAP** 



LOG CROSS PLOT



RASTER LOG

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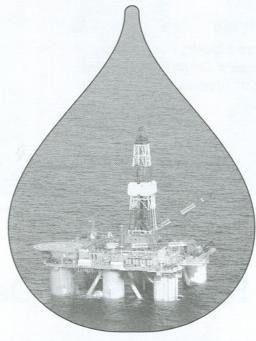
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- Keynote address
- Fault and horizon relationships in building complex 3D reservoir models Rob Chelak, Landmark Graphics.
- Geological modeling of naturally fractured reservoirs, reconciling engineering and geoscience perspectives - Pierre Chenet, Beicip, Inc.
- 3D modeling using multiple scenarios and realizations, practical work processes and practices - Claude Scheepens, Roxar, Inc.
- Uncertainty assessment in reservoir modeling, an integrated approach Emmanuel Gringarten, t-surf, Inc.
- · Methodology and application of reservoir property modeling Kexian Yang, Technoguide, Inc.
- · Case history: 3D modeling of a gas field in the overthrust belt of Western Wyoming, challenges and implications - Bob Klein, Dynamic Graphics, and Mike Miller, BP.
- · Group discussion

#### Registration includes attendance, proceedings publication, and refreshments. Registration cost:

Members\*- \$75.00 (before April 15); Non-Members—\$95.00 (and after April 15); Registration at the door-\$115.00. Information: sdronamraju@lgc.com. Please visit www.hgs.org for any changes.

(\* Member of Houston Energy Council: HGS, GSH, HAPL, SIPES, SPE-GC, SPEE-Houston, SPWLA-GC).

To register for the May 9, 2002, HGS Symposium on <b>Reservoir Modeling</b> , send this form and your check made out to <b>HGS—Reservoir Modeling Course</b> to: HGS, 10575 Katy Freeway, Suite 290, Houston 77024.					
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Westchase Hilton • 9999 Westheimer Social 5:30 p.m., Dinner 6:30 p.m.

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by Christopher R. Scotese, PALEOMAP Project, University of Texas at Arlington

# 3D Paleogeographic and Plate Tectonic Reconstructions: the PALEOMAP Project is Back in Town



Figure 1. Reconstruction of present-day bathymetry and topography in paleo-coordinates for the late Miocene.

The PALEOMAP Project is known for its synthesis of the plate tectonic, paleogeographic, and paleoclimatic history of ocean basins and continents during the last 1,100 million years, and the illustration of Earth history through maps, computer animations, and Geographic Information Systems (GIS). In this talk, Chris will present his latest 3D paleogeographic and plate tectonic maps and animations (see cover illustration of Paleo Topography and Bathymetry of the Late Cretaceous 80 MMYA).

Global plate tectonic, paleogeographic and paleoclimatic reconstructions will be presented for the early Miocene, Late Cretaceous, Permian, and Devonian. These reconstructions use 3D paleotopographic and paleobathymetric information to represent the surface of the Earth and the shape and depth of the

ocean basins. Each map is composed of over 6 million pixel-points that capture digital elevation information at a  $10 \times 10$  km geographic resolution and 40 meter vertical resolution. This quantitative, digital approach to paleogeographic modeling permits new ways to visualize and analyze the changing surface of the Earth through time using standard GIS (ESRI 3D Analyst, Spatial Analyst), 3D modeling, and computer animation techniques.

The process of building a 3D paleogeographic map begins with the digital topography and bathymetry compiled by NOAA, the BEDMAP Project, and the IBCAO Arctic Project. The topographic and bathymetric information is gridded at a 6-minute resolution, and the individual data points (pixel-points) are

International Explorationists continued on page 15





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15

#### **International Explorationists**

continued from page 13

rotated back to their paleopositions using the global plate tectonic model of the PALEOMAP Project. The resulting map is reconstruction of present-day bathymetry and topography in paleo-coordinates (late Miocene, Figure 1).

In the next processing steps, the digital elevation and bathymetric values are corrected to take into account the complex effects of thermal subsidence, glacial rebound, tectonic and volcanic activity and erosion. The result is a revised global paleotopographic and paleobathymetric surface. To complete the 3D paleogeographic model the new topographic surface is digitally "flooded" by raising or lowering sea level according to the estimates from eustatic sea level curves.

The new paleogeographic map raises interesting geological questions. For instance, the shorelines shown in the early Miocene map (Figure 2) are familiar but not identical to today's coastlines. Florida is flooded, as are the molasse basin of the Alps, the Persian Gulf foredeep and the peri-Caspian region. But surprisingly, so are the Amazon and Parana basins. Conversely, if sea level were higher, one might expect that Southeast Asia would be flooded. However, geologic evidence indicates that Southeast Asia was emergent during the early Miocene. This suggests that dynamic plate tectonic forces associated with subduction in the Java-Sumatra trench may be "pulling-down" the leading edge of Indonesia.

The digital topographic and bathymetric models presented here are currently being used for paleoclimatic and paleoceanographic simulations. They provide the framework and foundation for a detailed and quantitative modeling of Earth surface processes since the late Precambrian.

#### **Biographical Sketch**

CHRIS SCOTESE is professor of geology at the University of Texas at Arlington, where he teaches global tectonics, basin analysis, and GIS. For more than 25 years, he has been making maps and animations showing the plate tectonic, paleogeographic, and paleoclimatic evolution of the continents and ocean basins. His maps can be found in *National Geographic*, *Scientific American* as well as in numerous scientific books and journals.

He received his PhD at the University of Chicago, started the PLATES Project at Institute for Geophysics (Austin), was a senior research geologist at Shell Development Company (Houston), and together with Malcolm Ross developed GIS software to produce plate reconstructions (PALEOMAP Foundation). His award-winning website, www.scotese.com, describes with maps and animations the current research work of the PALEOMAP Project.

#### You can contact Chris at:

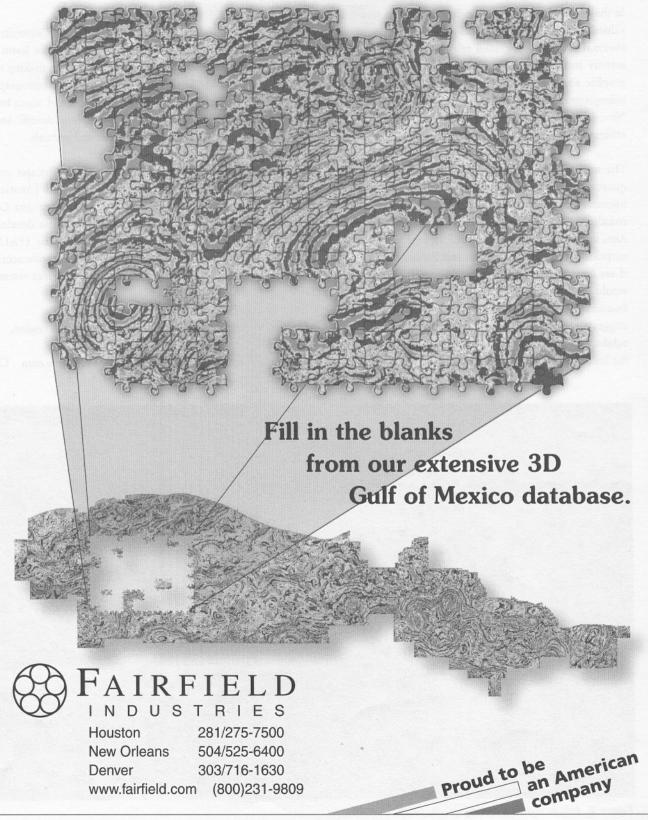
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Figure 2. Paleobathymetry and topography for the early Miocene.

# Missing a few pieces of the seismic puzzle?



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by Thomas E. Ewing Venus Exploration, Inc., 1250 NE Loop 410, San Antonio TX 78209

## Review of Late Jurassic Depositional Systems and Potential Hydrocarbon Plays, Northern Gulf of Mexico Basin

#### **Abstract**

Post-salt Upper Jurassic siliciclastic and carbonate rocks in the East Texas—North Louisiana—Mississippi region record the early post-rift evolution of the Interior Zone rift basins of the northern Gulf of Mexico Basin. Four major river systems were fixed in space but variable in supply rate; they carried sand and mud in from the northwest (ancestral Red River), the north (ancestral Ouachita River), the northeast (ancestral Mississippi River), and the east (ancestral Alabama River). Shoal-water carbonate deposits formed when siliciclastic inputs were low and shallow-water, high-energy conditions prevailed—usually in association with basement highs, salt swells and abandoned deltaic shelf margins.

Smackover shoal-water carbonates formed within an extensive carbonate ramp from south-central Arkansas to central Texas and were influenced by initial salt movement. Subsequent Haynesville-age Gilmer carbonate shoals in Texas rimmed riftrelated high blocks, as well as highs formed by early salt movement. Siliciclastic sedimentation progressively dominated east of Shreveport, and submarine fans developed in association with a lowstand episode. During early Cotton Valley time, a major southeastward advance of the ancestral Red River delta formed the Taylor and Bossier sand series, while to the east, lower Terryville shoreline sands began to prograde southward in front of an expanding lagoon. During late Cotton Valley time, continued clastic sedimentation formed wave-dominated deltas in Texas and upper Terryville strike-fed sandstones in north Louisiana. At the close of Cotton Valley deposition in the earliest Cretaceous, regional transgression allowed Knowles carbonates to "colonize" the abandoned shelf edge and form a thick shelfedge reef complex on its seaward slope. The significant "Calvin" lowstand wedge of sandstones was deposited offshore of this edge in Louisiana during a subsequent major sea-level fall, and was then covered by Winn carbonates deposited during the subsequent sea-level rise.

High-potential exploration plays remain in Upper Jurassic strata. Smackover and Buckner/Gilmer shoals have produced over 10 trillion cubic feet of gas (TCFG) and 750 million barrels of oil (MMBO) in East Texas and North Louisiana, but large segments of the complex atolls along the Sabine Uplift have not been defined. Complex shoals may rim old rift-related highs such as the Sabine and Wiggins highs. The Gilmer ("Cotton Valley Lime") pinnacle reefs of the Robertson-Leon trend may develop (in one form or another) over a broad swath of east-central Texas into westernmost Louisiana. Haynesville-age submarine fans may extend eastward into Mississippi. Updip Cotton Valley is an established 10-TCF tight-gas sandstone play in Texas and Louisiana, but its basinward extensions have high untapped potential. Significant high-quality Upper Cotton Valley production similar to the North Louisiana "blanket sands" may still be found in central Mississippi. The earliest Cretaceous (Knowles/Calvin/Winn) margin is poorly tested. Calvin-like sandstones of the lowstand wedge should occur in east-central Texas and in southwestern Mississippi.

#### **Biographical Sketch**

**Dr.** THOMAS EWING is a geologist and geophysicist with 21 years of experience in hydrocarbon exploration and research in geology and geophysics. He received a BA in Geology from the Colorado

Luncheon Meeting continued on page 19

# Houston Geological Society 19th Annual\* (\*sort of)

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College in 1975, an MS in geochemistry from New Mexico Institute of Mining and Technology in 1977, and a PhD in geological sciences from the University of British Columbia in 1981. Dr. Ewing was a research geologist for over four years at the Texas Bureau of Economic Geology. While there he was in charge of geologic analysis of Gulf Coast geopressured reservoirs and geothermal resources, served as a co-author of the "Atlas of Texas Oil Reservoirs", and served as compiler of the Tectonic Map of Texas. Since 1985 he has been co-owner with Linda Ewing of Frontera Exploration Consultants, Inc., a San Antoniobased consulting company. He has worked with Venus Exploration, Inc. since 1985 for its ongoing, successful exploration efforts in the Yegua Trend of the Gulf Coast Basin, Cotton Valley trend of Texas and Louisiana, West Texas, and Kansas; he is now a Senior Explorationist at Venus. Dr. Ewing is a member of many regional and national professional societies, is a Certified Petroleum Geologist (#4538), and served as Treasurer and Vice-President of the AAPG Division of Professional Affairs. He is an AAPG Delegate from the South Texas Geological Society, and served as Vice-Chairman of the AAPG House of Delegates in 1992-3. He also served as President of the Energy Minerals Division of the AAPG, and in that position held a seat on the AAPG Advisory Council. Dr. Ewing chaired the Edwards Aquifer Committee of the South Texas Geological Society in 1988-90, which issued a call for geologic and technology-based aquifer management. He served as President of the South Texas Geological Society in 1990-1, and as General Chairman of the 1996 GCAGS Convention in San Antonio. Tom has spoken extensively at local, regional, and national geological meetings and has authored or co-authored over 70 published papers and abstracts. Among other awards, he has twice received the Gulf Coast Section AAPG Levorsen Award (1982 and 1999), and the GCAGS Distinguished Service Award in 1993.

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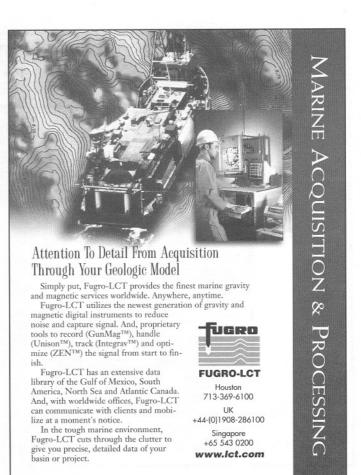
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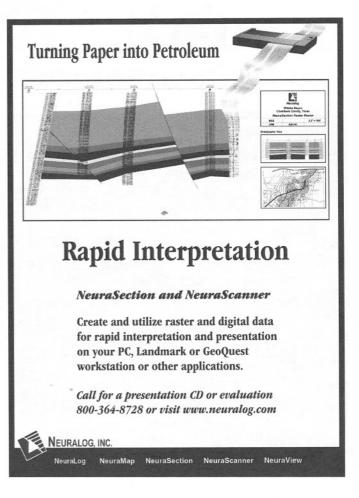
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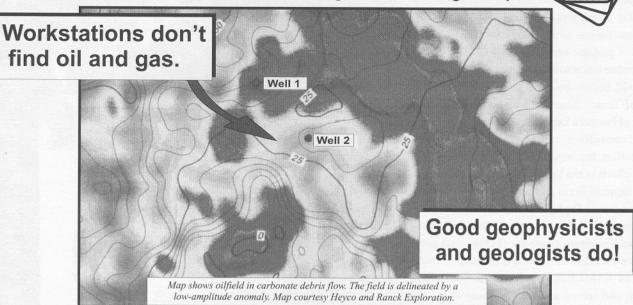
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Young Professionals in Geosciences

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June 20 Dinner Meeting

July 4 Horse Racing

August 1 Special Dinner Meeting



### Who Are We and What Do We Do?

The NeoGeos are a group of Geologists, Geophysicists, Hydrogeologists, Engineers, Environmental Geoscientists and anyone else who practices or has close connections with the geosciences (usually associated with the oil industry), who meet regularly to socialize, network, and meet other young professionals in the Houston Area. Many people have heard of us, but new hires are coming in to Houston all the time, so we thought we would give a brief outline of what the NeoGeos do.

The group was started in 2000 by Andrea Adams (Hess) & Kelly Latter (BP), themselves young professionals, as a means for people new to the profession, and new to Houston, to meet other "new hires". Denise Stone from the HGS helped the idea become reality in the eyes of the HGS. The group started with a handful of members, and our size has grown by word of mouth and thanks to the hard work of the founders and the support of the HGS. Our success is measured by the fact that we now have a sister group being started in New Orleans.

Our guidelines suggest that members should have less than five years experience in the industry or have received a degree in the last five years. Interns, graduates, those searching for employment, or those practicing the geosciences are all welcome at our events. We try to meet at least once a month, and all events that we hold are informal. We currently have over 250 members in over 30 different companies, from the large multinationals to the small independent oil companies and consultancies, and many students.

The NeoGeos is a great way to meet young people from outside your company, so why not come along to one of our events and see what we do. Events include: short courses, socials (monthly), dinners (bimonthly), guest speakers, field trips, site visits, volunteering (Houston Museum of Science, Earth Science Week, AAPG), beach clean-ups, BBQ's and picnics, newsletters, Website, HGS events involvement, student expos.

#### **News and Upcoming events**

March marked the AAPG Convention held in Houston. NeoGeos were asked to volunteer at the conference, and many NeoGeos attended in a registrant role. From a personal perspective the conference was great, but from a NeoGeos perspective it was brilliant! The NeoGeos had a social at the Front Porch Pub in midtown on Tuesday evening of the convention. This was a great success, with over 30 people attending. There were some visitors from out of town and also some from overseas. It is always great to see any young professionals, even if they are visiting, as it gives us all a chance to swap notes on possible places that we might be posted to! Many thanks to those who did volunteer at the convention, either sitting at the information desk, in the International Pavilion, or helping with poster sessions and short courses. I know I had great fun, and met many interesting people.

Events coming up in May include a social and a BBQ and hike. The social will be held at Champps Americana Sports Bar on Thursday, May 9. The bar is in the Uptown Mall, just north of the Galleria, on the west side of the 610. Exit on San Felipe and head west, then north on Post Oak Blvd, and take a left on to Uptown Park Blvd. The Mall is on the right, and the bar is on the far side. We will be there from 5:30 p.m. onwards. The address is 1121 Uptown Park Blvd, 713-627-2333.

For those who love the outdoors, we are organizing a hike and afternoon picnic/BBQ on Saturday May 18. This will be at Brazos Bend State Park. The park has several miles of trails for both walking and mountain biking, and you can meet the "locals" too, as this is the prime place to see alligators! We will meet at the park at noon, and do a couple of the trails, then settle down for a quiet afternoon picnic. So bring your spouse, your friends, your pets (on a leash!), a Frisbee, and some food and drinks for the BBQ! We will provide the charcoal. The park

NeoGeos continued on page 22

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NeoGeos \_\_\_\_\_ continued from page 21

is about a 40 minute drive out to the southwest of Houston, heading out on the Hwy. 59 (SW Freeway). Follow the brown signs to the park that start after Sugar Land. The park is about 20 miles southeast of Richmond on FM 762, or travel south from Houston on State Highway 288 to Rosharon, then west on FM 1462. If you want to carpool contact Helena Griffiths on 713-839-9483.

#### Contact us

For more information on any of these events please do not hesitate to contact Helena Griffiths at 713-245-7978, or send an email to NeoGeos@ev1.net. We are always looking for new ideas for events and new members, so come along to one of our meetings and see what we are all about.

Helena Griffiths & the NeoGeos committee

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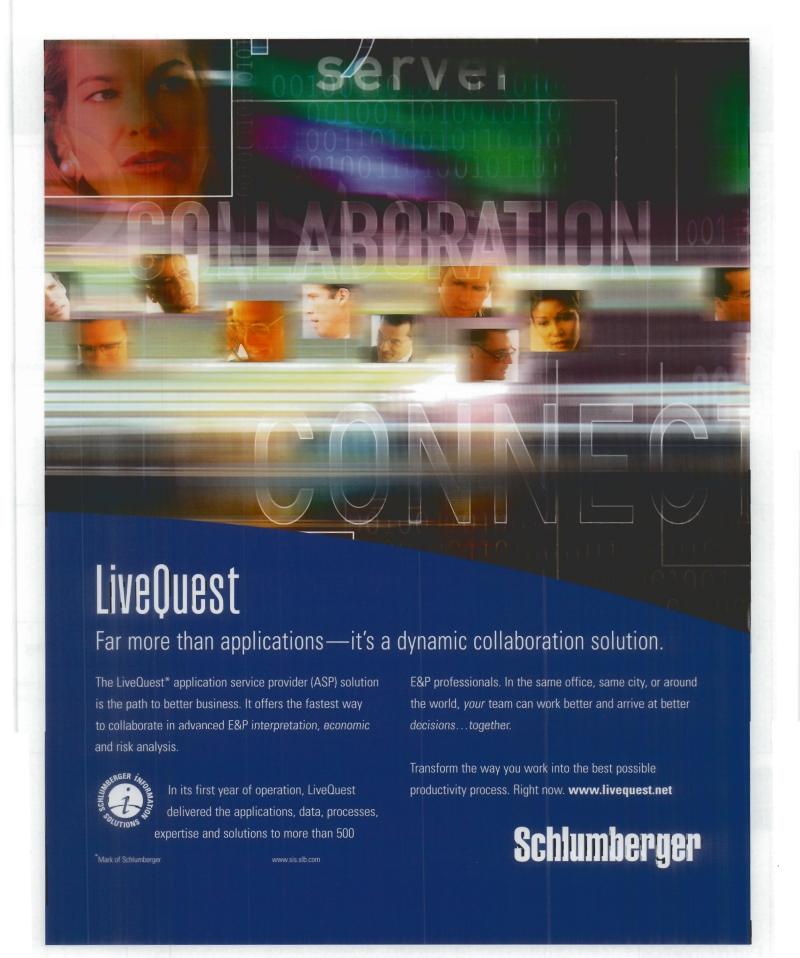
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Houston Geological Society Bulletin

# May 2002

Sunday

Monday

Tuesday

Wednesday

Members Pre-registered Prices: General Dinner Meeting .\$25 Env. & Eng\$25 Luncheon Meeting .\$25 International Explorationists .\$25 North American Expl\$25 Emerging Technology .\$25 Nonmembers and walk-ups\$30	Reservations for technical meetings must business day before the event. Voicemai cally marked with the date and time they email, a reply is sent confirming it. If you made and try again. Once name tags and be added even if they are sent. The new reservations.	1	
5	6	7 HGA Spring Luncheon See page 43 OTC CONFEREN	8 CE
12	HGS General Dinner Meeting by Robbie Gries Thinking "Out of the Box" —The Role of the Geologist in Meeting Future Energy Demand See page 7	14	15
19	20 HGS International Dinner Meeting by Chris R. Scotese 3D Paleogeographic and Plate Tectonic Reconstructions: The PALEOMAP Project is Back in Town See page 13	21	22
26	Memorial Day HGS Office Closed	28	HGS Luncheon Meeting by Thomas Ewing Review of Late Jurassic Depositional Systen and Potential Hydrocarbon Plays, Norther Gulf of Mexico Basin See page 17

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# **GEOEVENTS**

Thursday

Friday

Saturday

	3	4
HGS Symposium Reservoir Modeling See page 11  NeoGeos Social See page 21	10	HGS Skeet Shoot See page 18
SPE-GCS Petroleum Leadership Conference See page 35 SIPES Luncheon Petroleum Club GeoWives Luncheon See page 43	17	NeoGeos Picnic and BBQ See page 21
See page 15	24	25
	HGS Tennis Tournament See page 27	Reservation Codes  Use these codes to make voice mail meeting reservations.  Call 713-463-8920  Dinner Meeting (5-0-1)  Environmental and Engineering (5-0-2)  International Explorationists (5-0-3)  North American Explorationists (5-0-4)  Luncheon Meeting (5-0-5)  Emerging Technology (5-0-6)



#### **Upcoming GeoEvents**

June 6-8, 2002

AAPG SW Section Convention, Ruidoso, New Mexico, see page 39

June 15, 2002

Guest Night at the Houston Museum of Naural Science, see page 4

June 19, 2002

RMAG Coalbed Methane Symposium, Denver, Colorado, see page 42

June 12-20, 2002

Grand Canyon Field Trip, see page 29

July 4, 2002

NeoGeos Horse Racing, see page 21

August 1, 2002

NeoGeos Special Dinner Meeting, see page 21

August 8, 2002

The 6th Annual Summer Technofest, see page 30

August 27-29, 2002

APPEX, AAPG Prospect and Property Expo, see page 41

September 17-18, 2002

Petroleum Exploration Society of Great Britain—Call for Papers see page 29

September 23, 2002

HGS Golf Tournament, see page 29

June 22, 2002

GSH/HGS Saltwater Fishing Tournament, see page 37

October 22-25, 2002

9th Annual Petroleum Environmental Conference, Albuquerque, New Mexico, see page 6



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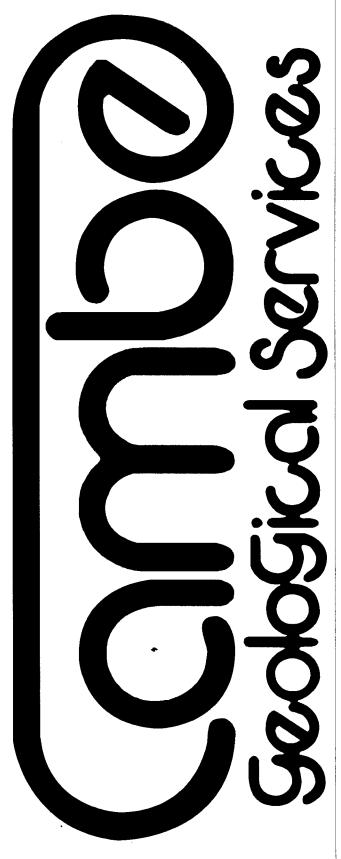
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#### "Africa, The Success Will Continue"

17-18 September 2002

Millennium Hotel, Grosvenor Square, London

If you are involved with Africa you will not want to miss this symposium. Leading speakers from across the world will be attending. The convenors are Ray Bate, Nick Cameron, Val Clure, Al Danforth and Gabor Tari. The topics include:

- \* Cretaceous/Tertiary uplift, mechanisms and prospectivity of the offshore Namibia to Cameroons
- \* The Lower Cretaceous of Gabon and Angola
- \* Palaeozoic Cratonic Basins of North Africa
- \* 3D structural modelling offshore Cote d'Ivoire
- \* Deepwater prospectivity of NW Africa
- \* Mesozoic Plate Tectonics of Rift Basins of North Central Africa
- \* Cretaceous Basins of North-Central Africa
- \* Exploration opportunities in Nigeria
- \* Gravity and magnetic modelling of offshore East Africa
- \* The offshore Natal (SA) Basins
- \* Basin modelling and prospectivity of East Africa

Each presentation will be 25 minutes duration followed by questions. There will also be an extensive poster display. If you would like to present a paper or poster please contact Ray Bate at ray@globalexplor.com or Al Danforth at al.danforth@worldnet.att.net. All abstracts should be submitted before the end of April.

The price for this symposium is £250 for members and £300 for non-members. Member rate is available to members of PESGB, SPE, Geological Society, EAGE, Houston Geological Society and the Geophysical Society of Houston. Delegates registering before 31st May can take advantage of the early bird fee of £200 (£250 for non-members). A registration form is included in the April PESGB Newsletter and also can be found on the PESGB web site. The registration includes all refreshments, lunch on both days, entry to the evening wine reception and a comprehensive abstract volume.

There are various sponsorship opportunities available. If you or your company would like to support the most prestigious Africa event of 2002 or would like more details please contact either Ray or Gail (gail@pesgb.org.uk).

Watch for the latest information at www.hgs.org or the "diary" section of www.pesgb.org.uk .

# SUMMER TECHNOFEST

Thursday, August 8, 2002 2:00 pm-8:00 p.m.

Note:

Hilton Westchase 9999 Westheimer (just inside the West Belt)



his is a fun and educational way to view the latest technology and research presented by approximately 40 vendors in an exhibit-hall style display. It's also a great place to see old friends and colleagues, socialize, and network. There will be finger foods, a time-limited sponsored bar (first come first served—one ticket each!) and a cash bar. Hope to see you there!!!!

**Cost:** \$5.00 HGS Members, \$10.00 Nonmembers (Nonmembers can sign up for membership and pay your dues at the door and save \$5.00 on the entrance fee!!).

E-mail to reservations@hgs.org to make an e-mail reservation. Please make or cancel reservations by noon, August 7. Include a name and a contact telephone number for every person for whom you are reserving or cancelling a place.

HGS members are requested to provide their HGS member number.

If you do not receive a reply email confirmation from the HGS office, please call the HGS office at 713-463-9476 to verify your email reservation was received.

**Phone reservation:** Use the HGS Voice Mail System at 713-463-8920. Please use Meeting Code (5-0-6).



#### VENDOR REGISTRATION FORM

#### **6TH ANNUAL SUMMER TECHNOFEST 2002**

Thursday, August 8, 2002 2:00 pm-8:00 p.m. Hilton Westchase, 9999 Westheimer (just inside the West Belt)

Description: The HGS Emerging Technologies Group is inviting companies to come and share their new technologies and research. We are reserving space at the Westchase Hilton Hotel. The event will be held on August 8 from 2 to 8 p.m. We will have finger foods and a cash bar. People attending this function will be eating and drinking while viewing the latest in technology and research. There will be an admission fee for each person attending. Exhibitors will be given two admissions with the booth fee. Additional admissions may be purchased. An announcement will be run on the HGS website, and if a URL is provided, the vendor list will be directed toward the vendor's website. Please indicate if you are interested in sponsoring the bar and if you are willing to donate a door prize.

Companies wishing to participate should fill out the following contract, and return to:

Rosemary Mullin

4019 Byron, Houston, TX 77005

(office: 713-522-9922, fax: 713-522-8999)

- 1) The undersigned hereby applies for space at the above-mentioned Technofest.
- 2) This contract must be signed and returned ASAP with check for \$350.00. (If you need more time to have a check cut, please contact Rosemary Mullin.) Make checks payable to HGS (Houston Geological Society).
- 3) Each company will be given use of one table and an electrical outlet. (If you wish to apply for more than one table, please contact Rosemary Mullin before mailing in contract.)
- 4) Setup will begin at 9:00 am by groups on the day of the event, and must be completed by noon. Dismantling will begin at 8:00 p.m. and must be finished by 9:30 p.m.
- 5) You will be contacted with more information at least 2 weeks prior to the event.

#### \*PLEASE INCLUDE THE CONTACT NAME FOR THIS EVENT!

COMPANY NAME
*CONTACT NAMETITLE
ADDRESS
CITYSTATEZIP
PHONEFAX
EMAIL
URL SITE
Bar Sponsorship (Y/N) Door Prize (Y/N)* *LET ME KNOW IF YOU DO NOT CHECK YOUR E-MAIL REGULARLY. I'LL BE SENDING MOST CORRESPONDENCE BY E-MAIL.
SIGNED
DATE
* If you have any questions, please contact: em-tech@e-seis.com

- Rosemary Mullin at 713-522-9922 or rpmullin@hotmail.com
- Shawn Porche at 281-343-7500 or shawnp@expro.net.
- Frank Rabbio at Frank Rabbio@OXY.com

31

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CONTACT:

Joe Eubanks or Bo Blue at Tel: (281) 367-8697 Fax: (281) 364-4927

# HGS DIRECTORY OF OIL COMPANY NAME CHANGES

The updated 14th edition (March 2002) of the HGS "Directory of Oil Company Name Changes" is now available. This publication is a cross-referenced list of oil and gas exploration and production companies that have merged, sold major assets, been acquired or otherwise changed their names. The purpose of this publication is to assist geoscientists in tracking down logs, paleo, production histories, well files and other data that may be obscured by company name changes. The directory cost is \$10.

The Name Change Directory can be obtained from the Bureau of Economic Geology in Austin and will also be available at many of the HGS luncheon and dinner meetings.

The Bureau's website is located at: www.beg.utexas.edu/mainweb/pubs01.htm, or you can contact Amanda Masterson by phone at (888) 839-4365

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"Leaders in Geopressure Estimation Innovation" HGS GOLF TOURNAMENT

#### Monday - September 23, 2002

Place: Kingwood Country Club & Deerwood Country Club

Format: Four-man scramble

Featuring: Closest to the pin

Bar-B-Q dinner

Refreshment stands

Trophies, awards and prizes

Longest drive contest

Betting holes

This year's tournament will be a four-man scramble. A shotgun start at 11:45 a.m. using both golf courses will be followed by an informal buffet dinner with a presentation of awards at the Kingwood Country Club. A player may select his/her own foursome or be placed in a foursome by the tournament committee. The field will be split into flights according to handicap, and the flights will be placed on one of the four courses. Entries will be limited to the first 144 four-man teams entered (576 total golfers), and will be accepted on a first-in basis.

The entry fee will be \$110 for HGS members and \$135 for nonmembers. Entries will be accepted only if HGS status is filled out correctly; check with the HGS at 713-463-9476 about a member's status as of June 1. Entry fee includes green fees, golf carts, driving range use with practice balls, and a buffet award dinner. So get your group together and come out and enjoy the competition, food, friends, and fun.

Companies or individuals interested in helping should contact Al Filipov at 713-881-8900 or by fax at 713-881-2878. To enter, fill out the entry form at the bottom of this page and mail with your entry fee (payable to HGS Entertainment Fund) to:

#### HGS attn: Joan Henshaw

10575 Katy Freeway, Suite 290 • Houston, TX 77024

#### SCHEDULE OF EVENTS

9: 30 -11:30 a.m. Registration and free use of driving range

11:45 a.m.

Shotgun start

4:45 p.m.

Cash bar, open buffet

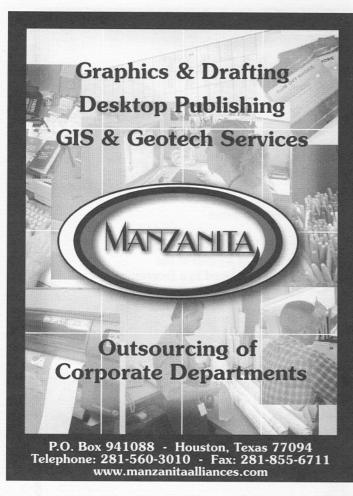
5:30 p.m.

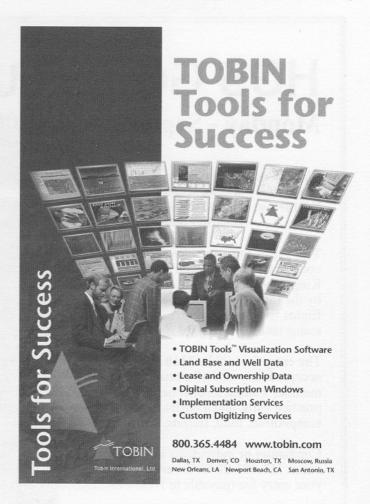
Dinner with awards presentation

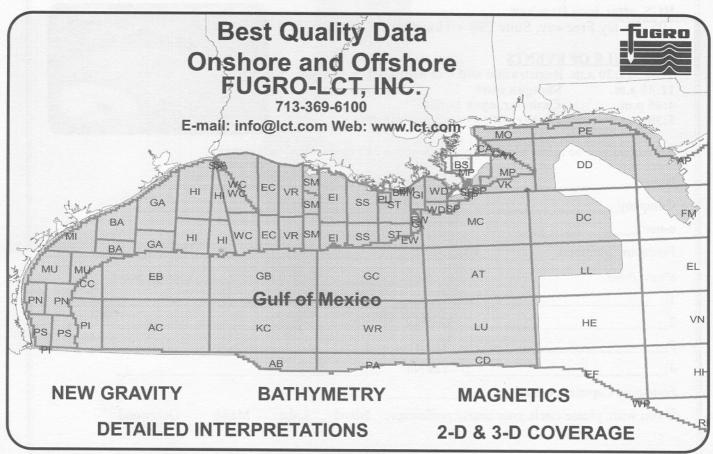


All entries will be acknowledged by return phone call the week of September 9.

Name						
Company	Phone					
e-mail						
Foursome Members	0	HGS Member	Con	npany Na	me	Handicap or
(Please Print)		(yes or no)				Average Score
1		Yes No				
2		Yes No				
3		Yes No				
4		Yes No	***************************************			
Foursome Captain's e-mai	il					
If you wish, please circle y	vour	course preference:	Island	Lake	Marsh	Deerwood







## 2002 Petroleum Leadership and Outlook Conference (PLOC)

The 2nd Annual Petroleum Leadership and Outlook Conference, sponsored by the SPE-GCS, will be held on May 16 at the Omni Houston—Westside (Katy Freeway at Eldridge). A number of experts both inside and outside the petroleum industry will discuss the issues facing our business today. Gary Hamel, a Visiting Professor of Strategic and International Management at the London Business School and nationally known speaker on the role of innovation in the workplace, will be this year's keynote speaker.

The one-day conference will be divided into three forums - Geopolitics and the Security of Supply, Leadership, and the Wall Street Viewpoint - followed by the keynote address. Speakers and sponsors are still being added, so visit <a href="https://www.ploc.org">www.ploc.org</a> for the most up to date information about session participants.



The issues discussed at highly-successful PLOC 2001 were timely and important for the industry. Audience participation made the conference extremely interesting and effective, with forums where both panelists and audience could highlight the issues and ideas and debate opinions.

Last year's conference attendees thought the PLOC was not to be missed, so mark you calendars now. Register online at <a href="https://www.ploc.org">www.ploc.org</a> for this year's conference. Early registration is \$195 per person. The price will rise to \$400 after May 10.

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#### MGS Spring Symposium

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## 2nd ANNUAL GSH/HGS SALTWATER TOURNAMENT



Saturday, June 22, 2002 Teakwood Marina, Village of Tiki Island Galveston, Texas

This year's Fishing Tournament will be held on Saturday, June 22 at the Teakwood Marina, Village of Tiki Island, Galveston, Texas. We are looking forward to a big event this summer and we encourage full family participation.

Trophies will be awarded for the heaviest individual Redfish (Non-Tagged), Speckled Trout, and Flounder for the Anglers, Junior Anglers, and Lady Anglers. Trophies will also be awarded for the heaviest individual Stringer - 1 Redfish, 3 Speckled Trout, and 1 Flounder.

Registration fee includes: launch fee, GSH/HGS Fishing Cap, BBQ meal at the marina after weigh-in, refreshments, Trophies, and DOOR PRIZES. For more information, please contact:

#### Bobby Perez (HGS & GSH)

281-240-1234 ext. 219 Office • 281-240-4997 Fax • 281-468-1809 Cell • 281-495-8695 Home E-mail addresses: rdphtx@aol.com or r\_perez@seismicventures.com

The Geophysical Society of Houston and the Houston Geological Society are non-profit organizations serving the Geophysical Industry. Corporate and individual contributions are appreciated and will be acknowledged on several sponsor boards and banners at the weigh-in station and marina. All contributors will be recognized in their respective organization newsletters following the tournament. This is a great way to entertain friends, family, business associates, and clients. So spread the word!

#### **GSH/HGS SALTWATER TOURNAMENT**

NAME:	COMPANY:		
ADDRESS:	The second second	-0.4/	_
PHONES: (H)	(B)	_(C)	-√/ ^
E-MAIL ADDRESS:	100	5 C.Y	
and rules sheet by e-mail. P	tion form, each participant will be provided lease register <b>EARLY</b> your check for \$60.00 per contestant paya	All and the second second	itinerary
Ms. Joa	GSH/HGS SALTWATER TOURNAMEN n Henshaw, 10575 Katy Freeway, Suite Phone: (713) 463-9477 • Fax: (7	290 • Houston, TX 77024	
Registration Fee: \$	+ Sponsor Contribution: \$	= TOTAL \$	
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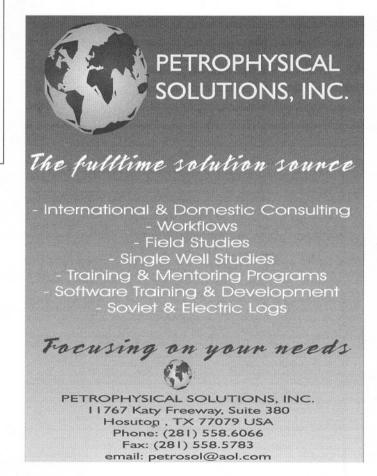
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## Remembrances

Since the last communication (February 1) from the HGS Remembrances Committee, our geological community has lost the following members:

**Howard L. Garrett** passed away January 17, 2002. He attended the Colorado School of Mines, receiving a geological engineering degree in 1949 and a masters in geology in 1950. He retired from a distinguished career with Shell Oil (Pecten) and was an Emeritus Member of the HGS. A donation in the memory of Mr. Garrett will be made to the HGS Undergraduate Scholarship Fund.

**Evelyn Mary Etter,** 53, of Houston, passed away Monday, March 4, 2002 after a lengthy illness. Evelyn was born in Philadelphia on June 13, 1948 and attended Rutgers University at Camden, New Jersey, where she earned a Bachelor of Science degree in geology. In 1976, she received her Master of Science degree in geology from the University of Kentucky. After moving to Houston, she worked many years in the petroleum industry and was a long-standing member of the Houston Geological Society. Evelyn was active with many conservation and nature-preservation organizations. A memorial donation will be made to Rutgers University.

#### William C. Robbins

Sr. Exploration Advisor, TOTALFINA ELF bill.robbins@totalfinaelf.com or (713) 647-3506  $\ \square$ 

#### PLEASE NOTE

The *Bulletin* apologizes for an inadvertent error in the March issue, pg. 41. A donation made "in honor of" the <u>very much alive</u> **Dr. C. O. Durham** was accidently labeled "in memory of". The *Bulletin* and the W. L. Calvert Fund apologizes for the error and any concerns it may have caused Dr. Durham's friends and colleagues.

The Editor

## 2002 Southwest Section Convention American Association of Petroleum Geologists

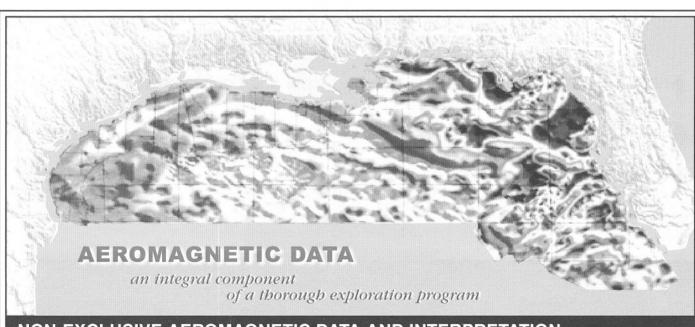


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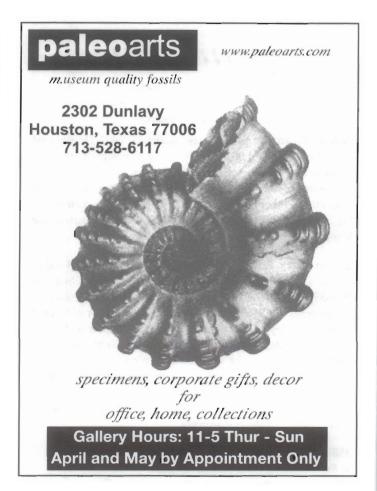
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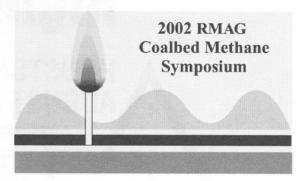
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## June 19, 2002

## Third RMAG Coalbed Methane Symposium

The Denver Marriott City Center Lunch Included, Social Hour Afterward

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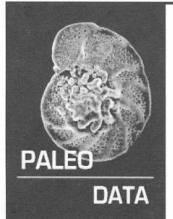
The Symposium will provide an opportunity to meet your colleagues, learn about new and potential plays; developed and emerging drilling, completion and production practices. There will also be reviews of what contributed to the success of productive basins such as the Powder River, San Juan, Uinta and Raton basins.

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From Your President - Millie Tonn

Our year has been terrific one, yet it is rapidly drawing to a close. But before we bid it farewell, we will have one last bash. Our Annual Meeting scheduled for May 7, 2002, at 11:00 a.m., will include an informal style show and luncheon at the Racquet Club. There will be models from the HGA and musical entertainment by one of our own members—Laima Gaizutis. Chairing this event will be Sara Nan Grubb, with the able assistance of Margaret Jones and members of their committee. Also included is the business meeting when new officers for the upcoming year are announced and introduced.

One more time—Membership! We need to expand our membership. Let's all work on bringing this about in the coming year.

What has helped make our year go so well has been the talents, hard work, and contributions of our Officers, Board members and members of our various committees. Special thanks go out to the following:

- \* Ann McFarlan, our First Vice President, for planning our parties
- \* Anne Rogers, for an excellent job serving as our Secretary, along with serving as Party Chairman for The Great Caruso
- \* Margery Ambrose, for her effort in collecting our dues on time and trying to increase our membership
- \* Jackie Smith, for a fine job being our Chief Financial Officer
- Winona LaBrant Smith, for her time spent putting together our year book
- \* Gwinn Lewis, for a super job as Editor of the Eclectic Log
- \* Kathryn Bennett, for providing a wonderful service sending out cards and notes to our members who were ill or had experienced the loss of a love one, as well as designing neat name tags for our parties
- \* Susan McKinley, our media specialist, who earned special kudos for covering our news in the HGS *Bulletin*
- \* Janet Steinmetz, for a great job chairing the Jazz Brunch last September
- \* Daisy Wood's, for her flair for party planning, making GAME DAY a very enjoyable event

- Helen Thomas, our Historian/Photographer, for working diligently recording us for posterity
- \* Lois Matuszak, for a first class job serving as our Parliamentarian; and last but not least,
- \* Linnie Edwards, who gets an extra big Thank You for mailing the Log.

And special thanks go to all the others who were not listed, but helped with our activities.

I should like to conclude on a personal note: with the ending of my tenure as HGA President for 2001–2002, I want to express my deepest appreciation for having been given the opportunity to hold this position. I thoroughly enjoyed the year and it was one of my best times. I am truly thankful to all of you—the members, fellow officers and board members for the support and cooperation I was given. It made my job a memorable and wonderfully enriching experience. And although time marches on, friendships and memories are lasting and enduring.

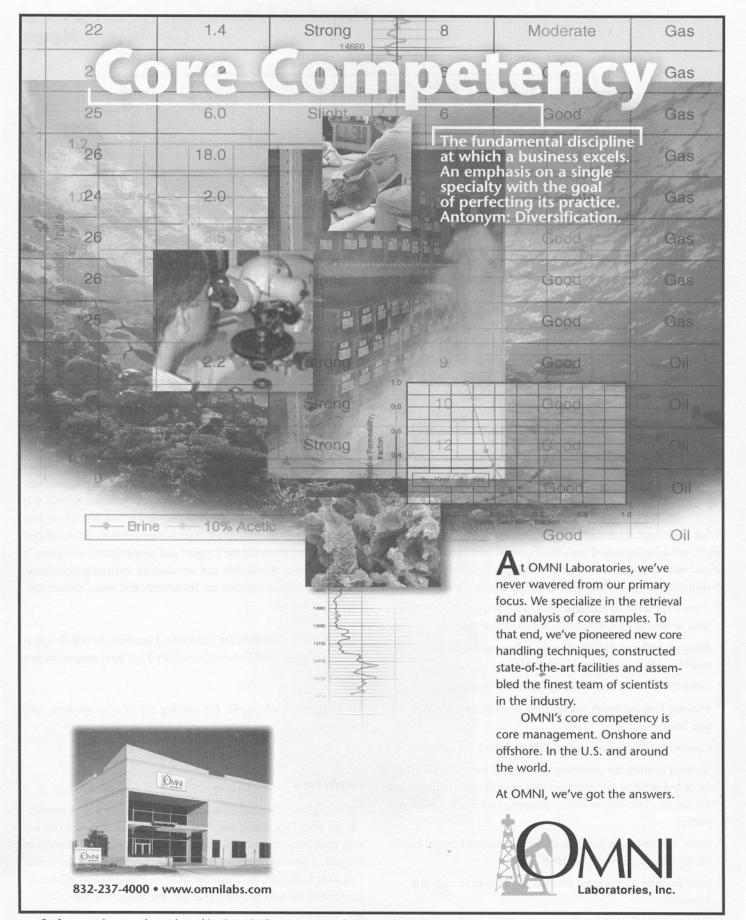
My sucessor as President, Jan Stevenson. I am sure she will do a fantastic job for you and I know you, will lend her your support as you did for me.

My sincerest thanks again for making my year so pleasant and memorable

#### **GeoWives**

Thanks to all the GeoWives officers and volunteers for a wonderful year. Our theme was "Expanding Horizons" and I can say with confidence that we succeeded. Plan to attend our final event of the year, a business meeting, followed by a luncheon at the Junior League at 11:00 a.m. on Thursday, May 16. Please join us in May, or any time in the next program year. You are always welcome.

Alice Cook, GeoWives President



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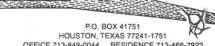
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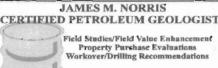
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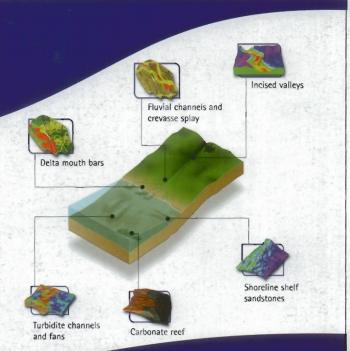
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