OCTOBER 2004

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
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10 **SEG Annual Meeting**	11 **SEG Annual Meeting**	12 **SEG Annual Meeting**	13 **SEG Annual Meeting**	14 **SEG Annual Meeting**	15	16
17	18	19	20 **Tech Breakfast**	21 **SIPES Luncheon** **Rock Physics SIG**	22 **Tennis Tournament**	23
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VOL. 39, NO. 2 NEWSLETTER October 2004

Technical Luncheon

Date: Wednesday, October 27, 2004

Time: 11:30 AM

Location: Petroleum Club, 800 Bell, Houston

Cost: $28 with reservation / $33 at the door

Reservations: GSH 713/463-9477 Email: Joan@hgs.org
(reservations are encouraged)

Title: ***The Winds of Change: Anisotropic Rocks - their Direction of Fluid Flow and their Associated Seismic Signatures***

Speaker: Dr. Heloise Lynn

Abstract:
Although 20 years ago it was politically incorrect to admit that horizontal permeability anisotropy resulting from aligned connected porosity was linked with seismic anisotropy (azimuthal anisotropy), the winds have changed.

Our industry now has a respectable worldwide effort in research, acquisition, processing, interpretation, and modeling that pursues precisely that linkage.The current thinking is that unequal horizontal stresses and/or vertically aligned fractures can provide the aligned connected porosity which may result in horizontal permeability anisotropy. The presence of vertically aligned fractures and/or unequal horizontal stresses typically causes azimuthal anisotropy.

The earliest efforts pursued the azimuthal variation of PP and SS traveltimes and amplitudes, because these pure-mode seismic waves measurements are the *"easiest"* measurements our industry can process and interpret and because we believe we understand traveltimes and amplitudes. Thus our documentation of the relationship of azimuthal PP and split shear-wave measurements was founded. As time went on, the PS modes (P-S1 and P-S2) or the split C-wave (converted wave-P down and S up), were used to document the shear-wave anisotropy arising from unequal horizontal stress and/or vertically aligned fractures.

Our industry is now grappling with what researchers point out as the "biggest" anomaly that

Technical Luncheon continued on page 10.

President's Column

National Energy Policy
By Pat Peck - September 5, 2004

We hear a lot about the consequences of a lack of a national energy policy. Actually we have lots of national energy policies. We have taxes on products, health and safety standards on every aspect of the business, regulations on pipelines, on refinery emissions, on pumps at service stations, etc. When it comes to telling us what we have to do our government is neither passive nor benign.

What I probably should do is denounce the lack of a coherent, well thought-out plan for addressing the number one crisis facing our industry and certainly one of the top ten problems facing our country. The problem is simple, easy to understand, requires no understanding of quantum mechanics or rocket science. The oil reserves in this country are dwindling. The issue is not "if" we run out, but when. The quicker we accept the fact that it is inevitable and that we have to do something about it, the better off we will be.

We can't depend on the ideal process of free enterprise solutions keeping pace with a gradually worsening crisis until an efficient, peaceful transition to alternative energy sources magically appears. First, those holding the keys to the bulk of the crude oil reserves in the world are unlikely to hand over the keys gladly and peacefully to new technologies, new solutions, and new owners.

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A Special Place and Time for Technical Luncheon

Inside This Issue

GEOPHYSICAL SOCIETY OF HOUSTON

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GSH Officers

Scenes from the Presidents' Luncheon

SEG Education Week

Houston November 9-12

• Pore Pressure Prediction in Practice *November 9th*	• Application & Interpretation of Converted Waves *November 9th & 10th*
• 3D Seismic Attributes for Prospect Identification and Reservoir Characterization *November 11th & 12th*	• Seismic Anisotropy: Basic Theory and Applications in Exploration and Reservoir Characterization *November 11th & 12th*

Register by October 15 and receive a free book!!
Geologic Columns of the Leading Edge *By Thomasson and Lawyer*

To register or for more details
visit our Web page at
http://ce.seg.org

Or contact Candice Chinsethagid, SEG Professional Development Specialist
918-497-5526 * cchinsethagid@seg.org

Host Hotel: Courtyard by Marriott Houston I-10 West

Register early to reserve your place in one of these outstanding courses. Register for 2 consecutive courses and receive a **$100.00** discount.

Editor's Note

To insure your information reaches the GSH society members in a timely manner it must appear in the appropriate newsletter issue. Please note the following deadlines and plan your function's publicity strategy accordingly. Items must be received on or before the corresponding deadline date. Materials can be sent to John Sumner at sumnergeo@earthlink.net with a copy sent to Fernanda Araujo at fernanda.v.araujo@exxonmobil.com. If you have any questions please call John Sumner at 713/666-7655 or Fernanda Araujo at 713/431-6126.

2004 GSH Newsletter Deadlines

Issue ..... November 2004
Deadline..... October 8, 2004

Issue ..... December 2004
Deadline..... November 12, 2004

Announcements

Rock Physics SIG
October 21, 2004

GSH Tennis Tournament
October 22, 2004

SIPES SOCIAL
November 11, 2004

Auxiliary

The Geophysical Auxiliary of Houston Begins a New Year of Programs!

The GAH began the year on Tuesday, September 21st with a fabulous family style Ladies Learning Lunch at Maggiano's Little Italy. Our guest speaker, Ms. Teresa Richbourg, from the Houston Bar Association, gave us a very informative and educational presentation discussing laws related to probate, estate planning and elder law that affect our lives as women, mothers, daughters, wives and caregivers. Members and guests were also treated to a warm dining experience in the tradition of family and friends. We enjoyed a delicious selection of salads, pastas and desserts. What about that Nonna's Toasted Pound Cake with hot fudge sauce? What a treat! Many thanks to Chairperson Donna Parrish, and her committee; Georgeann Massell and Mary Elizabeth Sims, for a wonderful afternoon complete with lovely decorations, favors and door prizes of fun and frivolous Murano art glass jewelry.

Our next event will be a trip to the Brookwood Community on Wednesday, November 10th. As always this will be a marvelous opportunity to enjoy a lovely lunch and browse the gift shop in anticipation of the holidays. Contact Co-Chairpersons Emilie Fulton at (281) 242-1806 or Susan Graul at (713) 462-1552 for more information.

The GAH members, spouses and guests are invited to a Special Winter Event on December 2 at The Great Caruso. We will join the Houston Geological Society Auxiliary for a holiday luncheon and show at this well known Houston location.

The New Year will find the GAH at the scenic Houston Racquet Club on January 18th, where we will be treated to a delicious luncheon and fashion show from Chico's. We will enjoy seeing our own members model the latest in fashion from this wonderful retailer.

The Geophysical Auxiliary of Houston invites the wife of any present or past member of the GSH or SEG, the widows of former members of the GSH and SEG, and women members of these organizations to join us and become a member for 2004-2005. Our Membership Chairperson, Kathi Hilterman, wants to hear from you! We are busy planning several events for your enjoyment and yearly dues are only $15.00. We are looking forward to a great year and would welcome you to join us. ***Call now and don't miss out!*** Call Kathi at 713-467-2599 or GSH Liaison, Luann Cefola at 281-759-7338 for a membership application and information on how to join.

President's Column continued from page 1.

Over the last thirty years or so OPEC has managed to keep the price of crude just below the economic viability horizon of alternative energy sources. They're aware that by doing this they can ensure alternative energy sources won't be economical and as a result won't be developed. Either the new geo-political realities of the present world condition or the pressure of holding the lid on a continuously growing supply/demand problem appears about to change the dynamics in this equation.

There are lots of ideas coming from our industry about what to do about this crisis. Some of them are self-serving and as such have very little chance of passing in the current "bash the oil industry" mood of the public and Congress. Energy is an extremely complex problem and there certainly is not a single, simple idea that provides a solution to all components of the problem. But if we set aside all of our vested interest we should be able to weave together most of the truly important facets around a few core themes. There is one

President's Column continued on page 10.

2004 GSH TENNIS TOURNAMENT

FRIDAY, OCTOBER 22, 2003 at 12:00 NOON
$30 per Entrant
Chancellors Racquet Club
6535 Dumfries, Houston 77096

Play will begin promptly at 1:00 pm and conclude by 5:00pm. Lunch will begin serving at 11:30am. Cold drinks will be available and we will have a keg for the COOLING DOWN TIME.

This will be a half-day A and B Scramble Tournament. A player will play with all other players in his group. Ladies will be teamed with partners in the A or B groups as they choose. In addition to TROPHIES there will be a drawing for a generous group of DOOR PRIZES.

To ensure the proper amount of court space, food and drinks, complete and send in the entry form as soon as possible, but no later than October 15, 2004. We have more room for players and encourage you to contact your associates to participate in the tournament. We are again inviting players in the Geological Society to join us so as to have more players and more fun. Don't forget to bring your sweater!

For more information call Joe Jones 281/438-5626 or Lee Lawyer 281/531-5347
Email: hjones7318@houston.rr.com or llawyer@prodigy.net

2004 GSH TENNIS TOURNAMENT ENTRY FORM

NAME: _____
Phone No: _____ Company: _____
Flight Preferred: A _____ B _____ Ladies _____

Make Checks Payable to: GSH Tennis Tournament
MAIL TO: Joe Jones, 3802 Pecan Valley Drive, Missouri City, TX 77459

Membership Report

Effective September 10, 2004

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Essiet Assiak
ExxonMobil

Raleigh Blumstein
Baker Hughes

Maurice Nessim
WesternGeco

Associate

Angela Blumstein
ChevronTexaco

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1	$125	$200	$400	$750
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6	$490	$782	$1565	$2935
7	$560	$895	$1790	$3355
8	$630	$1008	$2016	$3780
9	$700	$1120	$2240	$4200
10	$735	$1175	$2350	$4400

Business Cards:
$125 for 10 issues

To reserve your advertisement space or for more information contact Lilly Hargrave at: 713/463-9477 or email: lilly@gshtx.org.

2004 Fall Social
Houston Chapter of SIPES

Date: Thursday, November 11, 2004

Time: 6:30 PM. Cocktails (Cash Bar), Complimentary Wine; 7:30 Dinner
Location: The Petroleum Club, Discovery Room

Speaker: Dr. Carlton C. Allen, NASA Johnson Space Center

Topic:

"Exploring Mars — Robots and Humans; Geology and Biology (?)"

How would you conduct a program of geological fieldwork on the planet Mars? While our generation of scientists pursue this goal with robots, our sub-teen neighbor, son, daughter, or grandchild may walk on the red planet within our lifetime. How do we go about exploring Mars?

Our featured speaker Dr. Carlton C. Allen will give us his insights on the subject drawing on his experience in and contributions to methods of extraterrestrial exploration. Dr. Allen will present us with an overview and update of Mars geology, the observations we're making from the spacecraft currently operating on the planet's surface and from others in Mars orbit. He'll also discuss missions planned for the next decade, and the continuing controversy over possible evidence of life.

Dr. Allen is Manager of Astromaterials Acquisition and Curation at NASA. His office is responsible for the curation and distribution of NASA's extraterrestrial samples including the Apollo Moon rocks, Antarctic meteorites, and cosmic dust. Genesis and Stardust are two astromaterials sampling missions scheduled to return to Earth on September 8, 2004 and January 15, 2006. These will add new materials to his collection.

Dr. Allen earned a Ph.D. in Planetary Sciences from the University of Arizona, studying the interactions between volcanoes and ice on the Earth and Mars. As a Postdoctoral Fellow in the University of New Mexico, he researched formation mechanisms for Martian soil. Dr. Allen has studied the underground storage of high-level nuclear waste and the extraction of oxygen from the soil and rock of the Moon. His current research is split between studies of bacteria in extreme environments and the unique requirements of a Mars sample return mission.

2004 SIPES Social Registration Form

Mail this 2004 SIPES Social Registration form and a check ***(payable to SIPES Houston Chapter)*** to:
SIPES c/o BK Buongiorno, 1001 McKinney, Suite 801, Houston, TX 77002
Payment must be received no later than November 5, 2004.
Entrée choices: **(A)** Tournedos Benjamin – Two (4 oz) Stuffed & Topped with Mushrooms - Madeira Sauce
(B) Snapper Ponchartrain-Crabmeat, Shrimp and Oysters with Wine Sauce
(C) Vegetarian Plate

Name	Entree Choice (A, B, C)	SIPES Member (Y or N)	Telephone/Email
_____	_____	_____	_____
_____	_____	_____	_____

Number of persons attending _____ x $50 per person =_____Total payment due.

GSH Museum

By Tom Fulton

We have a crisis. We need to move or dispose of about 400 artifacts in about 2500 square feet of storage at Iron Mountain and a 50's recording trailer stored at WesternGeco. The loss of Bill Gilchrist last year places an additional burden on us as he built, saved, and documented each item in the museum collection over the years. Volunteers are needed to find new storage, move and document those items we wish to retain, and document items added in recent years. Planning and constructing exhibits for the SEG Annual Meeting in '05 is also necessary. We need, for example, to document and sort seismic records, courtesy of Unocal, that date to 1932 which have been the source for birth year records given to a number of people. One of the last of these was to Marion Bone who reported that his birth date was missed by two days!!

Recent additions to the collection include a theodolite given to the Museum last summer by Mike Castelberg, books from the library of Harry H. Sisson acquired from Ms Nancy Brandau through the help of Robert Black., files and books from Bill Gilchrist and most recently a 1930 report of the predecessor of Prakla courtesy J. H. Frasher. One interesting observation from the PROSPEKTION G. m. b. H. report signed by Dr. Heinrich Schlueter is his title—TROOP Leader! I wonder at what time in our history that we started to use the name PARTY and Party Chief? We have torsion

balance reports of that era that could be reviewed to see if those crews were parties or troops.

Lee Lawyer's request for ideas for next years Annual Meeting (the 75th!) could involve items from our storage such as:

- *Examples of seismic recording media from paper to analog and digital.*
- *The same for seismometer and marine streamer development.*
- *Comparison of recording equipment over the years.*
- *Comparison of interpretation equipment ie. plotting and migration devices*
- *Landmark/other workstations and their growth.*

It is hoped that the above will give someone a desire to help save our rich heritage.

Technical Luncheon continued from page 1.

links horizontal permeability anisotropy to seismic anisotropy-azimuthal variation in attenuation. However, attenuation has usually received cursory dismissal. We don't like *"dim zones"* being *"pay,"* because (1) they are *"too hard"* to map, (2) there are too many other reasons for dim zones rather than azimuthal attenuation, and (3) attenuation is too hard to quantify and attribute to any one cause per se. In the past, we have often used trace equalization, AGC, spectral whitening, and other very powerful processing techniques to remove dim zones. Processors worth their salt made those pesky dim zones look nice and bright and sharp!

In the past, attenuation has been a classic problem, and not in any guise a *"solution"* to anything. Now, however, we can glide forward on the next wave of multi-component, multi-mode, multi-azimuth 3D and 4D seismic powered by the winds of change.

Biography

Heloise Lynn started working in reflection seismic in the oil/gas industry in 1975, processing seismic data at Texaco, in Houston, Texas. In 1978, she completed her MS in Exploration Geophysics, Stanford University, and in December, 1979, she completed her PhD in Geophysics, also at Stanford University, in (post-stack) depth migration and interpretation issues within migration algorithms. From 1980-1984, she worked for Amoco, in Houston. In collaboration with Leon Thomsen and Rusty Alford, she worked on shear wave splitting, and anisotropy in SS reflection data. From 1984-present, she has been consulting on anisotropy, multicomponent, and multi-azimuth techniques.

From 1981 onwards, she has been working on recognition and use of S-wave splitting in reflection SS data (mid-1980s), using multi-azimuth and multicomponent data to characterize naturally fractured gas reservoirs (mid-1990s). In the mid-1990s, the U.S. Department of Energy funded three projects, wherein she served as principal geophysicist, to document how to use reflection seismic to characterize naturally fractured gas reservoirs. Her current interests include the co-rendering of high dimensional seismic datasets for interpretation (mid-2000s). *"Where you sit governs what you see,"* and 2 subsequent articles, by H.B. Lynn and Ping Chen and Chenyi Hu, in The Recorder, Canadian SEG, July 2003, discuss the visualization of high-dimensional datasets.

President's Column continued from page 3.

idea in my opinion, which seems somewhat promising. It consists of establishing a firm basement price for energy by utilizing a "floating tax" on imported crude. If the spot market price for crude falls below a certain minimum, the tax would kick in to support the price at the basement energy level, and the proceeds from the tax could be used to fund alternative energy research or incentives. This could result in an increase in our daily domestic production as well.

This appears, on face value, to be the exact opposite of what the exploration industry would support: more government control, more taxes, more bureaucracy, etc. It may generate other problems not mentioned at this time, but on the other hand, if we do not address this problem ourselves with some creative solutions, our national wealth will continue its journey to OPEC, and we will continue to be vulnerable to terrorism and national blackmail. If we do not become energy self-sufficient, a day may come when the current crisis will seem like "the good old days".

SIPES Luncheon

Date: Thursday, October 21, 2004

Time: Social: 11:30 am / Lunch: 11:45 am

Location: Petroleum Club, 800 Bell (downtown Houston)

Cost: $30 for members and affiliates pre-registered by 12 noon Tuesday, October 19th. (No-shows will be billed.)
$35 for non-members, guests, and walk-ups.

Reservations:
Make reservations by telephone (713-651-1639), Fax (713-951-9659), Web-site (www.sipes-houston.org), or e-mail (bkspee@aol.com) to B. K. Starbuck-Buongiorno by 12 noon Tuesday before the meeting.

Contacts: John Parrish (1st_vice_president@gshtx.org)

Title: ***Use of Well Logs in Seismic Reservoir Characterization***

Speaker: Dr. Joel Walls*: Rock Solid Images, Houston

Abstract:

Seismic Reservoir Characterization, also known as reservoir geophysics, has evolved over the past several years into a multi-disciplinary, business-critical function in most ED&P organizations. Sheriff defines reservoir geophysics as "the use of geophysical methods to assist in delineating or describing a reservoir or monitoring the changes in a reservoir as it is produced." Reservoir geophysics is applied across a wide spectrum of the oilfield life cycle from discovery and early development to tertiary recovery. One critical part of this process is careful analysis and understanding of petrophysical properties from well logs and core data (seismic petrophysics).

This presentation will illustrate why seismic petrophysics is so important and will show how carefully constructed synthetic models can help the geoscientist interpret acoustic and elastic impedance inversion from seismic data.

Seismic Petrophysics can be performed on single or multiple wells and consists of the following basic steps.

Geophysical Well Log Analysis (GWLA)

- Collect and organize input data, reservoir conditions, and fluid properties
- Perform geophysical log interpretation for volume minerals, porosity, and fluids over entire well
- Edit logs and perform mud filtrate invasion correction (as needed)
- Generate missing curves (for example, Shear Wave Velocity)

Rock Physics Modeling and Perturbations

Perturb reservoir properties using rock physics, effective medium models, and compute new Vp, Vs, density curves.

- Fluid Saturation
- Porosity
- Lithology
- Net/gross

Synthetics

Compute synthetic seismic traces for insitu and modeled conditions. May also include:

- AVO response
- Acoustic impedance (AI) and elastic impedance (EI)
- Other seismic attributes as needed

Examples show the effects of mud filtrate invasion effects, wellbore washouts, and bad Vshear log on seismic well tie. An example is also shown of how seismic petrophysics can be used to interpret acoustic and elastic impedance inversions for oil saturation and porosity in an onshore US oil sand. The primary benefits of seismic petrophysics are improved well-to-seismic ties, improved calibration of seismic attributes to reservoir properties, and more reliable models of seismic response due to reservoir changes (vertically, laterally, and temporally). These models can improve interpretation of 3D seismic data, especially acoustic and elastic impedance inversion. This improved interpretation can reduce drilling risk, enhance field productivity, and ultimately increase asset value.

Note:
This presentation is based on OTC paper 16921, May, 2004.

Biography:

Joel Walls obtained his PhD in geophysics from Stanford University in 1983. He has been active in research and technical services related to core analysis, rock physics, and seismic reservoir characterization. Dr. Walls founded PetroSoft Inc. in 1992 to bring rock physics technology to the desktop. Rock Solid Images (RSI) was founded in 1998 from the merger of PetroSoft Inc., Seismic Research Corp., and Discovery Bay. RSI has 30 employees in Houston and Oslo Norway. Dr. Walls is Vice President of New Business Development.

SPECIAL INTEREST GROUPS

ROCK PHYSICS SIG

Date: Thursday, October 21, 2004

Time: 5:30 p.m.

Location: Visualization Center
Veritas DGC, Inc.
10300 Town Park Dr.
Houston, TX 77072

Contacts: Keith Katahara (keith@spinexp.com
Tad Smith (tad_smith@veritasdgc.com)

Reservations: Log onto GSHtx.org to make your reservations, or call the GSH at 713-463-9477 / Email joan@gshtx.org
Walk-ins welcome.

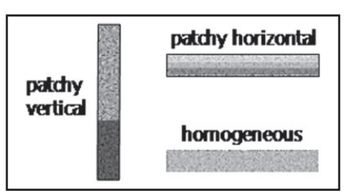
Title: ***Attenuation and Velocities of Partially Saturated Unconsolidated Sands at Sonic Frequencies***

Speaker: Kurt T. Nihei*, Zhuping Liu, Seiji Nakagawa,
Earth Sciences Division, Lawrence Berkeley National Laboratory,
1 Cyclotron Road, MS 90-1116, Berkeley, CA 94720 [ktnihei@lbl.gov]

Abstract:

Sonic frequency extensional and torsional wave attenuation and velocity measurements on high permeability unconsolidated sands were performed over a range of gas saturations and for different gas saturation geometries. These measurements were carried out on sand packs encased in a thin polycarbonate jacket subjected to hydrostatic confining pressure. Analysis of the laboratory data and the corresponding X-ray CT images of the gas saturation show strong sonic frequency compressional and shear wave attenuation associated with the presence of gas for the different gas saturation geometries (Fig. 1a,c). The velocities are in agreement with Gassmann theory for the tests with micro-homogeneous gas saturations and with a patchy saturation model for the tests with macro-heterogeneous gas saturations (Fig. 1a,b).

(a)



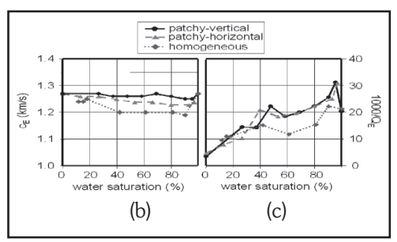


Figure 1.

Extensional wave velocities (b) and attenuation (c) at 3 kHz for a range of saturations and for three types of gas saturation shown in (a): (micro) homogeneous, patchy-horizontal, and patchy-vertical.

These results demonstrate that partially saturated unconsolidated sands under moderate confining pressure can produce strong compressional and shear wave attenuation at sonic frequencies. Similar to previous laboratory studies on partially saturated consolidated rocks by Cadoret et al. (1995, 1998) and Yin and Batzle (1992), the compressional wave velocity appears to be a good discriminator of sub-wavelength scale heterogeneity in gas saturation. Interpretation of these results in terms of the classic White-Dutta-Ode poroelastic model for patchy saturation will be discussed, as well as efforts to numerically model wave propagation through sands with general gas saturation heterogeneities, and to scale these results to seismic frequencies.

Biography:

Kurt Nihei is the department head of geophysics and a staff scientist in the Earth Sciences Division at the Lawrence Berkeley National Laboratory. He has PhD in geomechanics, an MS in applied geophysics, and a BA in geophysics, all from the University of California at Berkeley. His present research involves laboratory and numerical studies of elastic wave propagation in rock and sediments, including seismic wave propagation in fractured rock, anisotropy in compacting clays, and inverse methods for imaging fractures and Q.

GSH Golf Tournament

The Annual GSH Golf Tournament was held on May 17th at Kingwood Country Club. We were once again very fortunate to have more success than anticipated. This was George Lauhoff's 9th consecutive year to chair this event. Each year has presented some new challenges but we always seem to have a successful event. Our success comes from the players and sponsors and while it would be impossible to list and thank all the golfers, I would like to thank the sponsors. Without these donations, we would not be able to continue this event.

The sponsors for the 2004 GSH Golf Tournament were:

Fairfield Industries, Inc.; Strain, Dennis & Bates L.L.P.; Geophysical Pursuit; Indel-Davis/Fuji; Seismic Exchange, Inc.; Grant Geophysical; 3D Imaging; WesternGeco; CGG; A-G Geophysical; Spinnaker Exploration; Tidelands Geophysical; LaBarge Inc.; Veritas DGC; GX Technology; Seitel Data; Fugro; Steward Cable; OYO Geospace, Rock Solid Images; Houston Connector, Echo Geophysical; Diversified Well Logging; and Trace Seismic.

4th ANNUAL GSH/HGS SALTWATER FISHING TOURNAMENT 2004

Robert D. Perez, the Tournament Chairman, reports that this year's Saltwater Fishing Tournament was delayed about a month due to bad weather. Postponing the tournament to July 17 was a good decision for all concerned because the tournament was a big success for both the Geophysical Society of Houston and the Houston Geological Society. Everyone had a great time. The tournament took place at Teakwood Marina, Village of Tiki Island, Galveston, Texas, with no rain in sight. They had 60 anglers fish the entire Galveston Bay Complex with good catches of Redfish, Speckled Trout, and Flounder.

A ***"Special Thank You"*** to the volunteers of the event: Joan Henshaw & Lilly Hargrave (GSH/HGS office), Tom Parsons (Rinalli Boats), Greg Doll (Strand Energy), Tom Ayers (Teakwood Marina), Kayle Hahn & Allan Grimes (M-W Paper & Graphics Supply), Patricia Perez (Seismic Ventures), and Janet Autrey (Seismic Exchange) for helping with the registration and preparation of the event.

We also thank our sponsors for their support and generosity with special thanks to Kenneth Baucum, Jr. (Diversified Well Logging) for sponsoring the Fish Fry; Gene Lindsay (GX Technology) for sponsoring the Marina; David Orchard (Manzanita Alliance) for sponsoring the Awards; and Jeff Autrey (Seismic Exchange) for sponsoring the Fishing Caps.

Thanks to our sponsors: John Polleys (Roff Oil & Gas), Bobby Perez (Seismic Ventures), Ed Woodruff (Southwest Canoe & Kayak), Sukhdev Hyare (GeoCenter), Steve Bitcher (Veritas Geophysical - Hampson & Russell Software Services), Fritz Snyder (Geological Services), Joe Cruso (Manzanita Alliance), Jerry McCormack (Indel-Davis), Jim & Jeanie Harris (American Shooting Centers), Patrick Klem (Polaris E&E Services), Steve Tyrrell (Tyrne Data Services), Brian Naquin (Ovation Data Services), Greg Uhlig (Rinalli Boats), Lee Shelton (Veritas Exploration Services), Allan Grimes (M-W Paper & Graphic Supply), Bob LoPiccolo (eSeis), John Meeks (Meeks Outboard Service), John Cramer (PGS Marine Geophysical), Gregg Watts (GeoMap), George Lauhoff (Fairfield Industries), Kenneth Mohn (Fugro Multi Client Services), Brian Anderson (Fugro Robertson).

Bobby says, ***"Tight lines to everyone until next year."***

This year's winners were:

Heaviest Speckled Trout:

First Place:	Brian Anderson, 3lb. 3 oz.
Second Place:	Jeremy Denman, 2 lb. 11 oz.
Third Place:	David Garza, 1 lb. 16 oz.

Heaviest Redfish:

First Place:	Brian Anderson, 7 lb. 1 oz.
Second Place:	Jeremy Denman, 6 lb. 13 oz.
Third Place:	Russell Perry, 4 lb. 3 oz.

Heaviest Flounder:

First Place:	James Allen, 2 lb. 12 0z.
Second Place:	Al Danforth, 2 lb. 8 oz.
Third Place:	James Harle, 1 lb. 14 oz.

Heaviest Stringer:

First Place:	Brian Anderson, 10 lb. 4 oz.
Second Place:	Jeremy Denman, 9 lb. 6 oz.
Third Place:	James Harle, 7 lb. 0 oz.