Advance it Down the Fairway

by Kevin Fisher, Pinnacle Technologies
Houston, Texas

Note: This article is from the Fort Worth Chapter and is the fifth in a new series submitted by SIPES Chapters.

THE SETTING

- Barnett Shale
- Ft. Worth Basin, North Texas
- Low Permeability
- Naturally-Fractured
- Large Waterfracs

Location of Devon Energy fields 25 miles north of Fort Worth, Texas.

(continued on Page 18)

CANYON LAKE GORGE
SIPES Post Convention Field Trip
March 20, 2004

On June 28, 2002, it started to rain in San Antonio. Off and on – mostly on – it rained for five or six days. South-central Texas, which had been suffering through its usual lower-than-normal precipitation year quickly caught up – and then some.

The more than 20 inches of rain that fell on the quickly-saturated limestone terrane of the Hill Country had to go somewhere. The main drainage is southeastward, down the Guadalupe River, through the small city of New Braunfels.

(continued on Page 19)
The following information on national, state and environmental issues was presented to the SIPES Board of Directors on March 17, 2004 in San Antonio, Texas by Vice President of Natural Resources Brian Calhoun; Dan Reynolds, chairman of the SIPES State Legislative Affairs Committee; and Mike Austin, chairman of the SIPES Environmental Committee.

**Economic Considerations**

**Financial:** According to Alan Greenspan, Federal Reserve Chairman, “the US economy is poised for vigorous, lasting growth.” “Last year appears to have marked a transition from an extended period of sub-par economic performance to one of more vigorous expansion” said Greenspan speaking before the House Committee on Financial Services in February. Greenspan also presented a forecast of economic growth of as much as 5% in 2004. If the forecast holds true, then that would represent the strongest performance since 1984.

The ongoing economic recovery has not resulted in replacement of the 2 million jobs lost during the most recent recession. According to a *Fortune Magazine* article, “The current economic expansion, officially underway for 24 months, has somehow managed to destroy jobs rather than create net new jobs. Manufacturing jobs in particular just keep emigrating or evaporating.” Joseph Carson, economist for Alliance Capital, estimates that the world’s top twenty economies lost 22 million jobs from 1995 to 2002, and apparently China lost 15 million of those jobs during this period. Earlier this month, speaking to the House Committee on Education and the Workforce, Greenspan addressed the jobs issue, saying that “employment will begin to increase more quickly before long.” Greenspan also discussed the recent fall of the US dollar’s value against other currencies saying that the depreciation should eventually help our trade deficit as producers export less to the US. There is lots of optimism out there unless you are directly impacted by being one of the 2 million still looking for work.

**Corporate News:** By now everyone has heard about Shell Oil and El Paso Production taking significant write downs in reserve value. In the first months of this year, Shell cut reserve values by 20% and El Paso cut reserves by a whopping 35%. Neither of these write downs were due to new geological or reservoir engineering information, but were the result of a historically aggressive approach to over estimate reserves to support stock prices, secure financing and justify executive bonuses. I do not know how wide spread this is in our industry, but I know of several recent unsolicited offers to purchase production, which were based on sound economic parameters. In all cases the offers were rejected because they were significantly below “book value” and the companies did not want to take a write down and be forced to justify the loss to the SEC.

In the past year and a half we have seen the operational demise of several energy merchants, including Enron, Dynegy, and El Paso. What remains are four or five energy traders providing a real service in an environment where the market dynamics are more realistic. Energy trading will always be with us. Hopefully the chaos that was brought to this market has abated for the near term.

**Energy Consumption and Demand:**

**Natural Gas:** One of the best sources of information regarding natural gas supply, demand and pricing can be found at www.energypulse.net. This website has comprehensive articles about all energy consumption in the US and the world.

(continued)
Articles pertaining to the pending natural gas shortage in the US are prevalent. Over the past decade the US has seen a deterioration of gas reserves while demand has been increasing. Surprisingly, industrial demand for natural gas has actually declined during this period by around 10%. The average US demand increase of 2% per year, is attributed to: a) newly constructed natural gas fired power plants which have increased usage by 25% in the past five years, and b) demand for heating and cooling in residential housing. (Natural gas has captured 70% of the new home market in the US, followed by electric heat – 27%, and fuel oil – 3%).

Production of natural gas has been able to barely keep pace during this period. US gas production increased 2% for 2003 after declining by 3% in the prior year. Imports from Canada peaked at 14% of the supply and are now in decline. The last I heard, Mexico was a net importer of natural gas. The only source of new gas to bring into the market is through the drill bit or imports of LNG. For those of us involved in domestic exploration, development and or production, this bodes well for the near term. At the current level of rig activity, it is not anticipated that domestic producers will be able to maintain the reserve base and production levels necessary to supply the nation’s needs. From the information I have heard, LNG is a minimum of 4 to 5 years away before the infrastructure is in place so that it can have a substantial impact on the gas market. I still want to know how and where they are going to dispense all of that gas once the tanker docks and begins to unload. That’s a lot of MCFs dumped into the system all at one time. Needless to say, there is strong economic support for maintenance of gas prices at the current level.

Storage: According to EIA estimates, as of Friday, March 05, 2004, working gas in storage was at 1,143 BCF. Due to the recent mild weather in the major consuming areas, this only represents a net decline of 28 BCF from the previous week. Stocks were 407 BCF higher than last year at this time, but are still 103 BCF below the 5-year average of 1,246 BCF. As shown in the graph above, at 1,143 Bcf, total working gas is within the 5-year historical range.

Crude Oil: In February of this year OPEC agreed to a cut in oil supplies beginning with April’s production. The deal cut by the oil ministers would take 4% from production limits or approximately 1.0 million BOPD out of the world’s supply. OPEC also said it would seek to eliminate the 1.5 million BOPD attributed to those members producing above their current quotas. Since the announcement, oil prices have climbed to over $37/bbl. As a cartel, OPEC continues to have a credibility issue due to the continuing gap between official quotas and actual production. It is a wait and see attitude whether OPEC members actually adhere to the reductions. The move also cast serious doubts regarding OPEC’s desire to adhere to their stated target price range for Middle East Crude of $25 to $28 per bbl.

Of the myriad of emails that come across my desk, one contained an interview with Matthew Simmons, “who is the CEO of the world’s largest energy bank, Simmons & Company International.” In the interview, Mr. Simmons states: “Over the last year, I have obtained and closely examined more than 100 very technical production reports from Saudi Arabia. What I glean from examining the data is that it is very likely that Saudi Arabia, already a debtor nation, has very likely gone over its peak. If that is true then it is a certainty that planet Earth has passed its peak of production.” In retrospect, we may be finding that the peak of world oil production occurred in 2000. If this is the case, then how fast will the decline be, and where will alternative economic energy sources be found? All other sources which are currently available are either too expensive or too “dirty.” This bodes well for our industry for the future, but the real issue is how much will higher prices impact the US and the world’s economy.

*Energy Legislation*

**Energy Policy Act of 2003:** The Energy Policy Act of 2003 is now renamed the Energy Policy Act of 2004? Pete Domenici continues to push for passage of a comprehensive, but trimmed down energy bill while keeping the core provisions intact. The scaled down version of the bill deletes the liability limitations on MTBE and ethanol fuels, while still addressing the key issues for independent producers and including many of the tax provisions of H.R. 6. A press release from Senator Domenici’s office dated February 13, 2004, predicted that the bill would come up for consideration in early March. To date I have not found any information regarding Senate scheduling or consideration of the trimmed down bill. Once the Senate approves the bill, it will need to go back to the House for approval. Take time to remind your senators that we need a comprehensive energy bill. For a complete copy of the energy bill and a comparison of the House and Senate versions go to [http://energy.senate.gov/legislation/energybill2003/](http://energy.senate.gov/legislation/energybill2003/).
Other Items of National Significance

Federal Spending Budget: The Bush Administration formally sent its budget request for fiscal year 2005 to Capital Hill. Total funding for the Department of Energy was increased by 1.8% to 23.5 billion. Within the budget request for DOE spending, there was a decrease of 39.5% from FY04 for Fossil Energy Research and Development, Natural Gas Technologies or $26 million, and there was a decrease of 57.2% with respect to Petroleum-Oil Technology or $15 million.

U.S. Interior Department: The Interior Department has created a new position to “promote renewable energy on public land.” Brenda Aird was appointed as the department’s ombudsman for renewables. Ms. Aird is expected to be an advocate to help cut through red tape in obtaining permits on public lands that hold potential for the development of wind, solar and geothermal energy. “Representatives of several environmental groups said they knew little about Aird.”

Senate Action: The Senate approved a plan in March to cancel the purchase of 53 million barrels of oil for the nation’s emergency stockpile to keep more crude on the market and ease near-record gasoline prices. (Reuters - March 15, 2004).

DOL: The decision by the DOL to stop publishing the annual Crude Petroleum and Gas Production Workers’ index could have a negative impact on the oil and gas industry. The index fills a variety of needs as well as being included in the joint operating agreement used by many operators.

State Legislative Activity

Texas: A special session on public school finance is scheduled in the spring. Since many legislators have promised to lower property taxes, there could be the loss of a key franchise tax exemption used by many oil and gas producers in order to finance any school budget increases.

TIPRO reports that the Texas Land Commission has ruled that no vacancy exists in the 4,600 acre William King Survey in Upshur County. The vacancy petition was filed, and threatened the titles of approximately 1,200 surface owners and 5,000 mineral owners.

Oklahoma: OIPA states that they will do their best to stop any state attempt to impose the oil and gas industry for more revenue. One such proposal that OIPA has vowed to oppose is a permitting fee that would require payment of 1 percent of drilling costs. Another is proposed legislation that would allow private attorneys to represent the state to collect under-reported gross production taxes.

OIPA will continue to push for legislation that would clarify treatment of oil field equipment for ad valorem purposes. The association will also seek renewal of the three-tiered gross production tax on crude oil that falls as the price of oil decreases. OIPA would also like to see legislation that would decrease the burden resulting from the 5 percent income tax withholding for distributions to out-of-state members passed in 2003.

The Oklahoma Water Resources Board reports it is considering canceling regulations on culturally significant waters (CSWs). The 1999 rule had not been used until 2003 when the Caddo Nation requested that eleven rivers and eight lakes in Southeast Oklahoma be classified as CSWs. If granted, the tribe would have jurisdiction over the water and could delay drilling operations as well as increase drilling costs for oil and gas operators.

Colorado: COGA will continue its efforts to improve public perceptions of the oil and gas industry and its importance to the economy. Colorado royalty laws continue to be a concern for COGA and at the fringe of case law nationally.

Kansas: KIOGA expects legislators to introduce several bills affecting the oil and gas industry due to a $650 million deficit and a proposed $300 million, three-year education package. Anticipated proposals include 1) increasing the trigger prices for obtaining exemptions from severance and ad valorem taxes; 2) extending the severance tax exemption from 24 months to 48 months on coalbed natural gas; 3) amending the definition of “pool” in order to allow unitization of more than one single and separate natural reservoir; and 4) amending Article 9 to restore a priority creditor status for sellers if an oil and gas purchaser is in bankruptcy. KIOGA also states that the legislature may reconsider bills from the last session such as eliminating some of the sales tax exemptions and a bill to bar “percent of proceeds” gas purchase contracts.

New Mexico: The New Mexico Oil and Gas Association reports that the early budget news from the state legislative session is positive and there has not been a hint of a tax increase so far. NMOGA will be watching 1) HB 82 - a bill to clarify if the amounts withheld under the Oil and Gas Proceeds Witholding Tax Act are considered prepayments of estimated taxes; 2) HB 23 - a bill to create a pipeline safety fund; and 3) HB 326 - a strategic water reserve donation tax credit.

Mountain States: The Interior Secretary has approved a plan to open most of the 8.8 million acre “northwest area” of the National Petroleum Reserve-Alaska to oil and gas exploration. Also, the BLM has scheduled a lease sale for June 2.

California: In California, industries have to purchase their electricity from the utilities and Governor Schwarzenegger has stated that he supports re-establishing a direct access market. Buying directly from the wholesalers could save oil and gas producers millions over the life of contracts.

(continued)
CIPA is also looking to expand the Manufacturers Investment Credit to include the oil and gas industry. Most industries receive a 6% credit on qualified capital additions. The association is also working on ways to postpone the implementation of AB 16 that limits the ability of companies to transport offshore oil by barge.

Environmental News

New Source Rules for Clean Air Act Blocked By U.S. Court of Appeals: A federal appeals court blocked some of the Bush administration’s changes to the Clean Air Act from going into effect. The three-judge panel for the District of Columbia agreed with twelve states and several major cities that argued they would face irreparable harm to their environments and public health from the changes. The judges ordered the EPA not to implement its rules change until the panel can make a final determination, probably sometime in 2004.

The rule change would make it easier for utilities, refineries and other industrial facilities to make repairs as routine maintenance. It set definitions for what would qualify as maintenance, and as such, would not be subject to additional pollution controls. Without these guidelines, plants performing any routine maintenance work can be required to install expensive new pollution control systems. As a result, many projects that could reduce emissions are deferred.

Supreme Court Rules EPA Can Override States in Clean Air Act: In an ongoing fight between states and the federal government over control of environmental policy, the federal government has notched an important victory in the U.S. Supreme Court. On January 21, the Court narrowly ruled in favor of the EPA in its dispute with the state of Alaska over a mine permit.

Alaska Department of Environmental Conservation v. EPA involved the Red Dog Mine, a large zinc mine located in northwest Alaska. Because of the mine’s remote location, it runs its own electric generators, and thus is subject to Clean Air Act (CAA) requirements for power plant emissions. The mine decided to expand and add generation capacity several years ago. This triggered the requirement that a permit be obtained and the Best Available Control Technology be installed for emissions.

Under the CAA, the state permitting authority – in this case the Alaska Department of Environmental Conservation (ADEC) – runs the permit program and decides what type of pollution controls must be installed for compliance. Details of the permit were agreed upon and the mine commenced its expansion project.

The EPA subsequently declared the terms too lenient and demanded the mine install more stringent and costly emissions controls. ADEC challenged the right of the EPA to change their terms. The U.S. Court of Appeals for the Ninth Circuit ruled against the state agency. The case was appealed to the U.S. Supreme Court. The majority (5-4) opinion affirmed the lower court decision and upheld the EPA’s action. The court concluded, “EPA has supervisory authority over the reasonableness of state permitting authorities and may issue a stop construction order...”. In effect, the EPA has the last word on CAA permits. (www.heartland.org).

EPA & COE Drop Rule to Clarify “Waters of the U.S.” in the Clean Water Act: The EPA and U.S. Corps of Engineers announced in December that they would drop a proposed rule to clarify “waters of the U.S.” The definition is particularly important to independent oil and gas operators because federal agencies use the definition to exert jurisdiction over the industry for wetlands and storm water permits, and the development and implementation of Spill Prevention, Control, and Countermeasure plans. The EPA has historically interpreted “waters of the U.S.” very broadly to include those waters that are connected by surface flow (via intermittent streams and man-made ditches) to “water of the U.S.” even though a spill could not reach it.

The EPA cited that the decision to drop the rule to clarify the definition of “waters of the U.S.” was based in part on the negative comments received on the proposed rule. This failure to address this issue will encourage more lawsuits and allow courts to determine jurisdictional questions on a case-by-case basis. A recent 5th U.S. Circuit Court of Appeals decision reinforced the need to resolve this issue. This court noted that the government’s wetlands authority is not appropriate because the Clean Water Act and the Oil Pollution Act do not allow jurisdiction over waters that are neither navigable nor adjacent to navigable waters. As a result, the EPA and COE may not impose regulations over puddles, ditches and similar waters in states under the 5th Circuit’s jurisdiction (Mississippi, Louisiana and Texas).

The clear division among the courts may bring this issue back to the Supreme Court to revisit the Clean Water Act jurisdiction and answer unresolved questions. (OIPA Wellhead, January/February, 2004, p. 24).

New Oklahoma Department of Environmental Quality Air Standards: The ODEQ has created a new category of facility called “permit exempt facility.” Most oil and gas production facilities would be exempt from fees and permitting requirements. Pro-duction facilities where the total maximum rated horsepower (HP) for all engines is equal to 240 or less are exempt. Facilities with tanks and/or dehydrators are exempt if the actual annual average natural gas production rate is less than 650,000 cubic feet per day, and the actual annual average oil production is less than 250 barrels per day. If the parameters on a production facility are greater than specified above, operators will have to calculate facility emissions to ensure their facility emits 40 tons per year of regulated air pollutants or less to meet the “permit exempt facility” requirements. (OIPA Wellhead, January/February, 2004, p. 24).

(continued)
Texas Commission on Environmental Quality Studies Chlorides in Upper Colorado River: The TCEQ has begun a water study on about 60 miles of the upper Colorado River below E. V. Spence Reservoir. The EPA declared the segment to be impaired due to high levels of chlorides and dissolved solids. The study area contains thousands of oil and gas producing wells and numerous saltwater disposal facilities. The TCEQ lists a variety of man-made sources possibly responsible for elevated chlorides including brine.

The Railroad Commission plugged 17 wells in 2001 in or on the shores of the Spence Reservoir. Allan Frizzell, Texas Alliance of Energy Producers Legislative Chairman, points to the low level of Lake Spence (only 9%), the year in and year out lack of rainfall resulting in minimal flow, and the naturally occurring caliche and gypsum beds in the upstream area as likely sources. The monitoring should be completed in December 2004. (Texas Alliance of Energy Producers, Newsline, January, 2004, p. 7-8)

Environmental Groups Sue Wind Farm to Stop Bird Deaths: Giant wind turbines at Altamont Pass, California, are illegally killing more than 1,000 birds of prey each year, according to a lawsuit filed January 12 by the Center for Biological Diversity. “Birds come into the pass to hunt and get chopped up by the blades.”

The turbine owners claim to be doing all they can to protect the birds by painting rotor blades and installing perch guards. Plaintiffs want adequate mitigation or compensation. An expensive alternative would be to move the turbines to another area. (www.heartland.org)

Sources for this report are Associated Press, Fortune Magazine, Rocky Mountain News, American Oil and Gas Reporter, OIPA Wellhead, January/February 2004 issue, Texas Alliance of Energy Producers Newsline, and various websites mentioned.

U.S. Department of Interior Secretary Gale Norton Speaks at GCEM 2004

The New Orleans Chapter of SIPES was honored to be one of the host societies for U.S. Department of Interior Secretary Gale Norton at the second annual Gulf Coast Energy Market (GCEM 2004). Secretary Norton spoke at the GCEM 2004 evening reception to a large audience of oil and gas businessmen and women about the U.S. Department of Interior plans and activities concerning access to petroleum rich public land as well as the active role the oil and gas community has taken in helping to preserve the environment.

Secretary Norton is a lifelong conservationist, public servant and an advocate for bringing common sense solutions to environmental policy. She was sworn in as the 48th Secretary of the U.S. Department of the Interior in January 2001. The first woman to head the 153-year-old department, Norton has made what she calls the Four C’s the cornerstone of her tenure: Consultation, Communication, and Cooperation, all in the service of Conservation. At the heart of the Four C’s is the belief that for conservation to be successful, the government must involve the people who live and work on the land.

GCEM is a non-profit community project initiated by petroleum professionals in the greater New Orleans area. GCEM’s purpose is to present a local venue for multi-disciplinary networking and oil and gas business in the Gulf of Mexico basin. The GCEM is supported by the local technical and professional societies as one of the Joint Energy Societies of New Orleans projects. GCEM is endorsed by: American Association of Drilling Engineers, API-Delta, Southeastern Geophysical Society, Society of Independent Professional Earth Scientists, Council Of Petroleum Accountants Societies (COPAS), and the New Orleans Geological Society. More information about GCEM 2004 can be found at www.gcem.net.

Jeanne S.F. Phelps, #2509
Many thanks to the members listed below for their continuing support of our society.

**Oil Finder – $1000**

George S. Johnson – Amarillo, TX

**Driller – $500**

Arlen L. Edgar – Midland, TX
Earl E. Gaertner – Durango, CO
Lucius C. Geer – Houston, TX
James A. Gibbs – Dallas, TX
Donald C. Gifford – Dallas, TX
Robert M. Grace – Midland, TX
Patrick J.F. Gratton – Dallas, TX
Frank W. Harrison, Jr. – Lafayette, LA
Lee Wayne Moore – Midland, TX
Robert L. Prichard – New Orleans, LA
John E. Scherer – Midland, TX
Paul M. Strunk – Corpus Christi, TX

**Prospector – $250**

James L. Allen – Houston, TX
Michael P. Arden – Magnolia, TX
Michael N. Austin – Broomfield, CO
James B. Bennett – Houston, TX
Raymond M. Blackhall – Spring, TX
Richard W. Boechl – New Orleans, LA
Wilbur C. Bradley – Wichita, KS
E. Bernard Braun – Corpus Christi, TX
Johnnie B. Brown – Midland, TX
William C. Burkett – Midland, TX
Brian S. Calbouh – Corpus Christi, TX
David G. Campbell – Oklahoma City, OK
A.T. Carleton, Jr. – Midland, TX
Stewart Chuber – Schuylkill, TX
James S. Classen – Boise, ID
William J. Coffman – Norman, OK
Reynold D. Coppedge – Plano, TX
Robert D. Cowdery – Wichita, KS
Nance G. Creager – Midland, TX
Marshall C. Crouch – Denver, CO
Michael C. Crusan – Golden, CO
Edward K. David – Roswell, NM
Herbert G. Davis – Edmond, OK
Lawrence H. Davis – Oklahoma City, OK
George A. Donnelly, Jr. – Midland, TX
Ralph C. Duchin – Tucson, AZ
James P. Evans III – New Orleans, LA
David A. Eyler – Midland, TX
Robert B. Ferguson – Lake Forest, CA
Thomas E. Gentry – Midland, TX
William T. Goff III – Denver, CO
Peter G. Gray – Lafayette, LA
Mark E. Gregg – Houston, TX
Robert D. Gunn – Wichita Falls, TX
James H. Henderson – Dallas, TX
Terry L. Hollrah – Oklahoma City, OK
J.D. Hughes – Austin, TX
Leonard E. Jordan – Shreveport, LA
William M. Kazmann – Richardson, TX
Ralph O. Kehle – Durango, CO
Robert C. Leibrock – Midland, TX
Thomas Mairs – Dallas, TX
Roger L. Martin – Wichita, KS
Don D. Matson – Midland, TX
Barney C. McCasland, Jr. – Midland, TX
Philip J. McKenna – Littleton, CO
David M. Mitchell – Midland, TX
Daniel S. Morris – Houston, TX
Mark K. Mosley – Austin, TX
Marvin A. Munchrath – Lafayette, LA
Fred L. Oliver – Dallas, TX
Robert B. Owen – Corpus Christi, TX
Arthur J. Fansze, Jr. – Golden, CO
H. Rudy Parkison – Dallas, TX
Lloyd K. Parrish, Jr. – Wichita, KS
Michael A. Pollok – Purcell, OK
John M. Rakowski – Lakewood, CO
Julius M. Ridgway – Jackson, MS
A. Scott Ritchie – Wichita, KS
Peter R. Rose – Austin, TX
Deborah K. Sarey – Houston, TX
C. Randall Schott – Houston, TX
Daniel L. Smith – Houston, TX
Marion E. Spitler – Carrollton, TX
Tony Stuart – Hattiesburg, MS
John F. Sulik – Corpus Christi, TX
William D. Trumbly – Norman, OK
C.G. Tyner – Tomball, TX
Gene Van Dyke – Houston, TX
Glenn C. Wainwright – New Orleans, LA
Scott Wainwright – Metairie, LA
John V. Walter – Dallas, TX
Donald C. Wambaugh – Midland, TX
Robert Williams, Jr. – Albuquerque, NM
W. David Willig – Houston, TX
James M. Zottkiewicz – Metairie, LA

**Investor – $100**

Victor H. Abadie III – Montara, CA
Foy W. Boyd, Jr. – Midland, TX
Garnet W. Brock – Midland, TX
Marlan W. Downey – Dallas, TX
Duncan D. Dubroff – Houston, TX
Robert W. Gaddis – Tulsa, OK
David G. Griffin – Midland, TX
Jack S. Griggs – Wichita, KS
David N. Grimes – Midland, TX
Marc H. Helsinger – Sugar Land, TX
W. Ralph Holloway – Dallas, TX
John Alan Hord – Midland, TX
Alfred James III – Wichita, KS
Robert W. Luker – Corpus Christi, TX
Peter Mackenzie – Worthington, OH
Carl A. Marrullier – Houston, TX
Jack P. Martin – Lafayette, LA
Eugene L. Maxwell – Houston, TX
Christophe Mazzini – Dallas, TX
Wilbur E. McMurtry – Oklahoma City, OK
L.H. Michaelson – Midland, TX
M. Davis Payne – Midland, TX
Edward B. Picou – New Orleans, LA
Larry J. Rairden – Bellaire, TX
Edward G. Reilge – Midland, TX
William F. Reynolds – Wichita Falls, TX
Charles Schmidt – Valley Center, KS
Vinton H. Sholl – Houston, TX
Stephen A. Sonnenberg – Lakewood, CO
Robert W. Waring – Oklahoma City, OK
Jerome M. Westheimer – Ardmore, OK
I. Wayne Woolsey – Wichita, KS

**Scout – $50**

John T. Ahney – Tulsa, OK
Norman K. Barker – Midland, TX
Karl E. Becker – Wichita, KS
Orville R. Berg – Shreveport, LA
Herbert L. Brewer – Dallas, TX
Gene A. Carter – Corpus Christi, TX
James W. Caylor – Oklahoma City, OK
Don E. Claxton – Lafayette, LA
Kirby L. Cockerham – Greenwood Village, CO
William Furlong – New Orleans, LA
Eduardo Gonzalez – Carrollton, TX
Rian Grisemer – Corpus Christi, TX
H. J. Gruy – Houston, TX
Larry J. Jones – Houston, TX
John D. Kullman – Midland, TX
Arch J. Lair – Midland, TX
William J. Malin – New Orleans, LA
Patrick H. McKinney – Houston, TX
Gerald E. McQueen – Kingwood, TX
Eric L. Michaelson – Midland, TX
Jesse Clay Moore – Dallas, TX
Carl M. Padgett – Houston, TX
Wes B. Perry – Midland, TX
Robert E. Pledger – Houston, TX
Joseph L. Pritchett – Lafayette, LA
John W. Raine – Lafayette, LA
Norman D. Raman – Midland, TX
Perry O. Rowh – San Antonio, TX
Robert M. Sanford – Irving, TX
Wayland C. Savre – Houston, TX
Roy G. Sharrock – Dallas, TX
Don L. Shawer – Wichita, KS
M. R. Stipp – Midland, TX
Charles J. Swize – Pattison, TX
Michael R. Vasicek – Midland, TX
Joe H. Warren – Dallas, TX
George R. White – Lafayette, LA
Mark D. Wilson - Midland, TX
George R. White – Lafayette, LA
Joe H. Warren – Dallas, TX
George R. White – Lafayette, LA
Mark D. Wilson - Midland, TX
Dwight Cassell, #2261, of Austin, Texas was recognized during the AAPG Convention in April 2004 by AAPG’s Division of Professional Affairs with a certificate of merit for his service as the DPA Vice Chair in Austin in October 2002.

Stewart Chuber, #221, of Schulenburg, Texas received AAPG Honorary Membership at the association’s recent convention in Dallas. He also was the recipient of AAPG’s House of Delegates Distinguished Member Award to honor exemplary service to the House through committee work. He also recently served as Technical Program Chairman for the SIPES 2004 Convention in San Antonio, Texas.

Peter G. Gray, #1210, of Lafayette, Louisiana received AAPG’s Distinguished Service Award at the 2004 Annual Convention in Dallas. He was also recognized by AAPG’s Division of Professional Affairs with a Life Membership Award, the most prestigious award given by the DPA.

Barney C. McCasland, Jr., #92, of Midland, Texas was profiled in a May 6, 2004 article appearing in the Midland Reporter-Telegram by Ed Todd. Fifty years ago, Barney moved to Houston to organize Cities Service Oil Company’s Marine Offshore District. When he registered his family’s water, gas and electric utilities, he was selected by the Houston Chamber of Commerce as Houston’s first millionth citizen.

The announcement was front-page news in the city’s two newspapers, where he was also known as “Mr. Million.” He was honored with tributes, and given $10,000 in gifts. One of the gifts was a 1954 Chevrolet sedan which was traded in as a down payment on a new house because he had purchased a Ford station wagon earlier in the year. Barney McCasland also made coast-to-coast news when American Airlines flew him on a tour of America’s 11 million-class cities. He met many politicians including then-Vice President Richard Nixon and then-Senator Lyndon Johnson. Barney served as Houston’s “goodwill ambassador-at-large” while crossing the country in a four-engine DC-7. He said the move to Houston in 1954 was the 61st of his career. He and his wife, Frances, moved to Midland in 1962. They have attended most of the SIPES Conventions, including the 2004 Meeting in San Antonio.

Charles R. Noll, #2785, of Houston and Peter R. Rose, #1264, of Austin, Texas are candidates for president-elect of AAPG.

Past SIPES President Deborah K. Sacrey, #1271, was honored with AAPG’s Distinguished Service Award in April 2004. She was also presented with the AAPG Division of Professional Affairs Certificate of Merit for her work as a co-editor of the publication, “Heritage of Petroleum Geologists.” The SIPES Houston Chapter also honored Deborah for her efforts on behalf of the Chapter and the SIPES National Organization. (See Page 16).

William D. Trumbly, #577, of Norman, Oklahoma received Oklahoma City Geological Society’s Honorary Membership at an honors banquet in January 2003. His citation was written by Roger D. Wilkinson, #2289 who detailed Bill’s illustrious military service in the U.S. Army during World War II, where he received the Purple Heart with Cluster (Cluster meaning wounded more than once), the Combat Infantryman’s Badge, the European Theatre Badge with 5 Campaign Stars, the Bronze Star for heroic and meritorious achievement, and a battlefield promotion. Bill’s successful career in the oil and gas industry, along with his work in several industry associations and his community and church service were also profiled.

SIPES Foundation 2004
No Hassle Raffle Winners

1st Prize - $500
John T. Abney
Tulsa, Oklahoma

2nd Prize - $250
James K. Anderson
Norman, Oklahoma
Colles C. Stowell
New Orleans, Louisiana

3rd Prize - $100
Robert M. Sanford
Irving, Texas
Charles A. Brinkley
Humble, Texas
Thomas Mairs
Dallas, Texas
A. T. (Toby) Carleton
Midland, Texas

4th Prize - SIPES Glass Desk Ornament
Brian S. Calhoun
Corpus Christi, Texas
Channing Maumus
New Orleans, Louisiana
William D. Trumbly
Norman, Oklahoma
Charles A. Brinkley
Humble, Texas
Rex D. Coppedge
Fairview, Texas
Michael A. Pollok
Purcell, Oklahoma
George B. Vockroth
Jackson, Mississippi
Edgar B. Krider
Houston, Texas
Richard R. Lindsly
Frisco, Texas
Robert B. Owen
Durango, Colorado
So You Want Me to Buy Your Deal?
SIPES Foundation 2004 Seminar
John Wright
2 Hours - 30 Minutes

Film 1 - How to Be Self-Employed Successfully
Introduction
Stewart Chuber
How I Became a Successful Independent
Deborah Sacrey
30 Minutes

Film 2 - How to Succeed at Property Purchases
Jim Gibbs
30 Minutes

Film 3 - Making a Living on Small-Scale Operations
Stewart Chuber
30 Minutes

Film 4 - Minerals, Royalties and Overriding Royalties:
What They Are and How They Can Serve You
Don Tobin
30 Minutes

Film 5 - Orbiting the Giant Hairball
Lee Peterson
30 Minutes

Film 6 - Creative Thinking: An Independent’s
Method to Make Money
Richard Sams
30 Minutes

Film 7 - Resources for the New & Old Independent
Panel Discussion
- Financing, Venture Capital, Structuring Deals
- Marketing - How Good Are Prospect Expos?
- Canada, Alaska and Foreign Opportunities
- Networking Through SIPES & AAPG
- Questions & Answers
3 Hours

2003 Convention Films and DVDs are also now available

FINAL ANNOUNCEMENT AVAILABLE NOW!

AAPG and AMGP cordially invite you to the
AAPG International
Conference and Exhibition
October 24-27, 2004
Cancun, Mexico

PETROLEUM INDUSTRY IN THE
21ST CENTURY: TECHNOLOGY,
BUSINESS & FRONTIERS

PREREgISTRATION DEADLINE: SEPTEMBER 23, 2004
www.aapg.org/meetings/can04/
About twenty miles northwest of the city, the Guadalupe is dammed by Canyon Dam, to form Canyon Lake, a reservoir/flood control/recreational area, operated by the Corps of Engineers. The earthen dam’s top is 973 feet in elevation, but the lake usually has a conservation (normal) level of 909 feet; there is a spillway just southwest of the dam at 943 feet, designed to keep large floods from topping the dam. Water began flowing over the spillway on July 4. It was the first time that the spillway level was topped since the dam’s construction in 1964. Flow rates of >67000 cfs were reached on July 6, and a record lake level of 950.32’ – 7’4” above spillway level was recorded. Additional runoff along creeks – mostly spring-fed – downstream of the dam produced flow rates closer to 80000 cfs at New Braunfels.

The bottom line is that the flood control devices worked. Although TV audiences around the world gasped at the sight of a house in New Braunfels floating down the swollen Guadalupe, damage in New Braunfels was generally confined to about 50 feet on either side of the river (my house, although it got a good washing from the rain, was untouched by the floodwaters).

However, one consequence of the spillway’s overflow was a gorge cut into the Lower Cretaceous Glen Rose limestone, approximately one and one-half miles long, and up to 50 feet deep. As the floodwaters receded to normal levels, the gorge (not exactly a ”gorge” by Colorado standards, but spectacular in the middle of Texas) was exposed for examination without SCUBA gear.

This newly-exposed, pristine outcrop, the Canyon Lake Gorge, was the destination for the post-convention field trip after the SIPES 2004 Convention. About fifty earth scientists were on the trip planned and executed by Stew Chuber and Dick Sams, and led by independent geologist Wayne Jones and Texas State University geologist Carter Keairns.

The Glen Rose, which along with the overlying Edwards Group, forms most of the cliffs and mesas in the Hill Country, produces oil at the Alabama Ferry field and associated fields, mainly in Leon County, 125 miles northeast of Canyon Dam, and gas in the Maverick Basin, about the same distance southwest.

These are the closest areas of Glen Rose hydrocarbon production. Age-equivalent strata produce in northern Mexico. There is no hydrocarbon production anywhere near the dam, but the gorge presents an interesting, spectacular, and unique glimpse into the shallow-water carbonate unit that forms so much of the surface in Central Texas.

The thinly bedded limestones of the Upper Glen Rose are interbedded with more marly beds; these marls form the aquaclude that is the base of the Edwards Aquifer. The Aquifer is the sole source of drinking water for San Antonio, as well as the source for the many springs in the area.

In contrast, the Lower Glen Rose is more massive and “cleaner.” The Corbula bed - which crops out near the upstream end of the gorge - is an important stratigraphic marker, dividing the Upper from the Lower Glen Rose. At the gorge, the main Corbula (a small marine clam) bed has abundant ripple marks; several other beds are rippled. Some beds, particularly in the Upper Glen Rose, show a polygonal joint pattern.

The beds dip 1 to 3 degrees into a large regional fault; hence although the gorge is only about 50 feet deep, there is over 100 feet of Glen Rose exposed. There are also several small faults creating springs, which in turn create small scenic ponds and waterfalls. (See Photo Below).
The Glen Rose is often described as relatively unfossiliferous; however, at the gorge, there are abundant oyster beds, rudists, algal floats, the large foram Orbitolina, as well as the Corbula bed. No dinosaur tracks were seen on the trip; however, several track sites have been identified nearby. They are all in the Upper Glen Rose, and are protected by the Heritage Museum of the Texas Hill Country. A visit to one of the sites comprised the first part of the trip. (There are some tracks in the gorge area itself – they are near the eroded southern end, and we never reached them – W. Jones, personal comment.)

George Cushanik, manager of WORD (Water-Oriented Recreational Districts) told us of plans underway to open the area to the public soon. Land adjacent to the gorge is being acquired to facilitate entrances, both to the gorge and planned nature/hiking trails. Geoscientists at the SIPES Convention were lucky enough to see the gorge when it was kind of hard to get to; they, and many others, can come back, when it’s a breeze – and maybe tell their friends or grandchildren that “I was here when it was TOUGH.”

Lastly, why all the rain that created the gorge in 2002? Clockwise rotation in two adjacent areas of high pressure kept pumping moist tropical air into south-central Texas. After the welcome first few inches, it was definitely a case of “too much of a good thing.”

Bill Wilbert
Chairman, San Antonio Chapter

(Note: the numerical data on Canyon Dam and flow rates of floodwaters was taken from “SIPES 2004 Field Guide,” which was given to field trip participants on March 20, 2004 – the date of the trip. Also, the San Antonio SIPES Chapter had a meteorologist from the National Weather Service speak at one of its meetings, shortly after the flood).

Photographs by Wendy Storbeck.
CORPUS CHRISTI

Charles A. Steen delivered the January 2004 presentation. In 1950, Charles received his B.B.A. from Texas A & M. After college, he enlisted in the U.S. Air Force from 1951 to 1953, reaching the rank of staff sergeant. After the Air Force, Charles worked at Southwestern Oil and Refining starting out as manager of exploration and then as vice president of administration. In 1984, he struck out on his own and started Gulf Coast Energy. Gulf Coast Energy purchases gas from producers for sale end users, primarily along the Corpus Christi Ship Channel.

During our February meeting, we were pleased to have Thomas Feeny of Occidental Energy as our guest speaker. Mr. Feeny discussed the importance of the OXY Liquid Natural Gas Project, and how it would affect the local economy. With the announcement of OXY building an LNG plant in the Coastal Bend, everyone could not wait until the question and answer session afterwards.

Our March speaker, Gerald E. Thornton, Jr. head of the Oil and Gas Group at Matthews & Brancomb, PC., gave an informative talk to the attendees. Gerald’s talk pertained to the never forgotten and always important legal issues that are relevant to the oil and gas industry.

Ed Egger
Secretary

DENVER

Victoria B. Egorova, Ph.D., an independent consultant, spoke to the Denver Chapter in January at the monthly luncheon meeting held at the Wynkoop Brewery in Lower Downtown Denver. Her presentation was titled “Denver Independent Oil and Gas Companies in the Former Soviet Union.” After the disintegration of the Soviet Union, western oil and gas companies aggressively pursued new opportunities. The early ventures were in the Timan Pechora Basin, and later they rapidly spread to Western Siberia and the Caspian Basin. More recently, the large new projects have been concentrated in the Russian Far East and around Sakhalin Island. Almost all energy projects implemented with western participation in the FSU during the 1990s were focused on the development of the oil and gas deposits discovered and delineated under the Soviet system. The principal contribution of the western partners has been in the area of providing management and financing, and the biggest technical challenge has been access to markets.

Denver independents were among the first oil and gas companies that were willing to try harder and take greater risks while entering the FSU energy sector. Denver independent companies have successfully developed several major projects and have been actively involved as consultants and operators for smaller projects. The experience of Denver companies in the FSU typifies a number of individual efforts to develop projects that appeared to be technically sound but had to overcome political obstacles. The companies’ success was dependent on their ability to implement strategies addressing these issues.

The speaker at the February luncheon meeting was David Pyles, a graduate student at the University of Colorado and recipient of a SIPES Foundation scholarship.

February luncheon guest speaker David Pyles, a graduate student at the University of Colorado and recipient of a SIPES Foundation scholarship.

Ross Sandstone, Western Ireland-Application to Northern Gulf of New Mexico minibasin reservoirs.” The Carboniferous Shannon Basin is the site for Ross Sandstone deposition in Ireland, and this basin is similar to the small deepwater basins in the Northern Gulf of New Mexico which are important exploration targets. The study of the Ross Sandstone is a good ancient analog for the Northern Gulf of New Mexico minibasins as both are deposited in high amplitude, high frequency glacioeustatic cycles; both are deposited as submarine fans; deposition for both is basically in the same location throughout time; sediment accumulation rates are about the same; and they display similar thickness. Northern Gulf of New Mexico reservoir models can be constructed based on the Ross Sandstone analog.

In other chapter news, Denver Chapter member Bill Goff completed his term as SIPES National President in March. Also, the chapter lost a dear friend and longtime member with the passing of Phil McKenna in January. Phil is a former SIPES National President and he will be missed by many in the Denver oil and gas community.

Bill Miller
Secretary
NEW ORLEANS

It all starts with a good base map. In January, Alfred K. Tovar, senior regional account manager for Tobin International LTD., gave computer demonstrations of base/well map development and web-accessed vendor data. Mr. Tovar, a 25-year employee of Tobin companies, prefaced his “Tobin GIS for the Geologist” presentation with a brief, yet interesting, history of Tobin.

There is nothing better than valuable information that is free and the Minerals Management Service (MMS) provides just that. In February, Lee Tilton, chief of multimedia and Internet production for the Gulf of Mexico region of the MMS, gave an overview of web-based data delivery services concerning MMS public information documents and data. Additionally in February, the Louisiana Department of Natural Resources gave a free 6-hour session on SONRIS (Strategic Online Natural Resource Information System). This web-based application is important for all aspects of onshore Louisiana exploration and production. The class was well-attended in spite of what was a wet New Orleans winter day.

March brought us two speakers from a local vendor, Paleo Data, Inc., Albert Porter and Joshua Miller, skillfully addressed the importance of using paleontological data in Gulf of Mexico correlation. They showed how biostratigraphy is continuing to advance as a constructive discipline for exploration and production. Especially in areas of the Gulf of Mexico where there are no lithologic-based formations and limited lateral continuity, it is warranted to base the framework for the stratigraphic rationale on microfossil evaluation.

These applicable presentations show the chapter’s continued focus to provide the latest information and techniques to further the professional and business interests of our members. The events for the next two months are social ones, demonstrating the need to balance all the hard work with a little fun!

Billy Geen
Secretary

IN MEMORIAM
Phil McKenna, #1027
1929-2004

Phil McKenna, who served as SIPES President in 1987, the society’s 25th Silver Anniversary year, was not only a man of integrity and honesty, he also had great courage and optimism. During his term as president of SIPES, the oil and gas industry saw a great collapse in oil prices. Phil placed the major emphasis of his presidency on speaking out about the national energy situation, and its effect on the various oil and gas industries and professions.

He also helped to organize the SIPES National Energy Advisory Council. SIPES members in this group were actively pushing for the repeal of the Windfall Profits Tax, and the Fuel Use Act; they also advocated establishing national energy policies that would be beneficial to our profession and our country. During Phil’s presidency, SIPES and the SIPES Foundation attempted to raise funds to produce a public service film, “America’s Energy Dilemma,” hoping to draw attention to the need for a national energy policy.

Also during his presidential year, Phil began to experience increased symptoms of an inherited form of emphysema. Despite shortness of breath and discomfort, he maintained his good cheer and optimism with his friends and colleagues on the SIPES Board and in the Denver Chapter. After his SIPES work concluded, his lung problems continued to worsen, and he made the decision to try to undergo a lung transplant. Given his deteriorating health, this was a very high-risk option for him. After waiting for some time to be selected as a transplant recipient, he successfully underwent this surgery in 1994, which enabled him to resume activities for several years. He also became a champion for organ donation, and an avid speaker with the Donor Alliance Program.

Phil was born in Evanston, Illinois on March 14, 1929, and passed away on the morning of January 28, 2004. Before graduating from Colorado College in 1953 with a B.S. degree in geology, he served in the U.S. Air Force. His career began with Pure Oil Company in Olney, Illinois. He was later transferred to Worland, and then to Casper, Wyoming. In 1966 he moved to Tulsa, Oklahoma to work for Reading and Bates. He then moved his family to Denver in 1974 where he worked for Polaris Oil and Gas and Pexamin Petroleum before forming Wexford Resources in 1981. He had been active in the Las Animas Arch of Colorado along with the Powder River Basin.

In addition to his service with SIPES, Phil was a member of AAPG and RMAG. He served as president of RMAG in 1984. He received RMAG’s Distinguished Service Award in 1986, and Honorary Membership in 1989; he was named RMAG Outstanding Explorer in 1991. He was also an active member of St. Mary’s Catholic Church in Littleton. Phil enjoyed a great love for life and family. He is survived by Liz, his wife of 53 years; three children; and six grandchildren. His son, Don McKenna, is a geologist and manager of Wexford Resources in Denver, while son Robert McKenna has worked as a geologist for Samson Resources in Tulsa for nineteen years.

Respectfully submitted,
Lon McCray
Sue Cluff

Respectfully submitted,
Lon McCary
Sue Cluff

Respectfully submitted,
Lon McCary
Sue Cluff
DALLAS

The Dallas Chapter began the new year with the installation of the following officers: Jerry Watkins, chairman; Eddie Rhea, vice chairman; Mark Mathisen, secretary; Richard Thompson, treasurer; Ed Gonzales, membership; and Cliff Walker, activities. Lloyd Fons gave a presentation regarding near surface temperature data entitled “Temperature Theory of Oil and Gas Exploration.”

In February, the chapter joined the North Texas Energy Council for their 16th Annual Energy Symposium at Southern Methodist University. The symposium began with a luncheon and keynote presentation given by Pat Cook, safety manager for Halliburton, who spoke on contractor safety practices, anticipating the needs of client companies and their customers.


During the March meeting Dick Banks, #2931, reviewed the “Essentials of Subsurface Mapping.” He provided a contouring exercise for the audience, and made the case for using triangulation during the contouring of subsurface data in contrast to computer gridding and contouring.

Mark Mathisen
Secretary

**SIPES Chapter Meeting Information**

<table>
<thead>
<tr>
<th>CITY</th>
<th>CHAIRMAN</th>
<th>V-CHRMN</th>
<th>SECRETARY</th>
<th>TREASURER</th>
<th>MEETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARK-LA-TEX</td>
<td>Ralph Richardson</td>
<td>Mark Mathisen</td>
<td>Larry Rairden</td>
<td>Mike Bergsma</td>
<td>Petroleum Club, Smackover Room 4th Tuesday</td>
</tr>
<tr>
<td>AUSTIN</td>
<td>Bill Walker</td>
<td>Mike Cruson</td>
<td>Sue Cluff</td>
<td>David Dupre</td>
<td>Petroleum Club 3rd Thursday</td>
</tr>
<tr>
<td>DALLAS</td>
<td>Jerry Watkins</td>
<td>Lon McCarley</td>
<td>Dick Banks</td>
<td>Joe Finger</td>
<td>Petroleum Club 2nd Wednesday</td>
</tr>
<tr>
<td>HOUSTON</td>
<td>Phil Martin</td>
<td>Wulf Massell</td>
<td>Jeannie Mallick</td>
<td>Larry Rairden</td>
<td>Petroleum Club 3rd Thursday</td>
</tr>
<tr>
<td>MIDLAND</td>
<td>Jack Naumann, Jr.</td>
<td>Marc Maddox</td>
<td>Greg Hair</td>
<td>George Friesen</td>
<td>Midland Country Club 3rd Wednesday</td>
</tr>
<tr>
<td>NEW ORLEANS</td>
<td>Bob Murphy</td>
<td>Steve Poe</td>
<td>Ken Huffman</td>
<td></td>
<td>Fairmont Hotel 3rd Tuesday</td>
</tr>
<tr>
<td>OKLAHOMA CITY</td>
<td>Tom Smith</td>
<td>Wulf Massell</td>
<td>Linda Ewing</td>
<td>Joe Finger</td>
<td>Petroleum Club 3rd Thursday</td>
</tr>
<tr>
<td>SAN ANTONIO</td>
<td>Bill Wilbert</td>
<td>Jim Gamble</td>
<td></td>
<td></td>
<td>Petroleum Club 3rd Thursday</td>
</tr>
<tr>
<td>WICHITA</td>
<td>Terry McLeod</td>
<td>Greg Hair</td>
<td></td>
<td></td>
<td>Petroleum Club Meeting date varies</td>
</tr>
</tbody>
</table>
FORT WORTH

The Fort Worth Chapter of SIPES kicked off the New Year with a talk on the Mildred Peak Gold Project in Arizona. Fort Worth SIPES member Keith Shirley, #2871, and co-author Richard Somerville discussed a mineral mining project they have been working on over the last several years together. The mine, located in extreme southern central Arizona, is a strong gold anomaly with gold showings over a five-mile strike length and over a mile in width.

The area is yet unproven, but has potential of containing up to and over one million ounces of gold recoverable. The area is known for its world class copper/silver porphyry deposits and has experienced continuous mining since the 1880s. The Mildred Peak property was first known and explored during this time period, but for gold rather than copper and silver. Numerous old gold mines and diggings are scattered throughout the property, most were operated just before and after the turn of the century, but fell inactive just before World War I.

The Mildred Peak property is the first strong gold showing west of the copper/silver areas and was explained to us to be associated with the same basin and range region responsible for gold production northward into Nevada. Also, the area seems to be a pivot point from nearly all silver and copper to the east and gold to the west. It was noted that even though several mining companies have looked at the property in recent years, the property has been overlooked for various reasons, and these authors expressed how they feel that significant potential exists.

This talk was quite different for those of us who are so involved in the oil and gas industry!

In February, we were fortunate to have a SIPES Foundation Distinguished Speaker visit us to discuss sequence stratigraphy and 3-D seismic. Michael A. Fogarty, #1720, with Exploration Systems, Inc. in New Orleans, Louisiana joined us for an enlightening talk on how he has been utilizing 3-D seismic data sets to enhance plays, primarily in the Gulf Coast.

Mr. Fogarty explained how he felt that historically, both 2-D and 3-D seismic have proven to have little value for sequence stratigraphic interpretation or in lowering oil and gas drilling risk in the Eocene-Paleocene of Louisiana. Conventional seismic processing of modern 3-D seismic can be used to identify the major transgressive surfaces; however Mr. Fogarty feels it does not have the vertical and horizontal resolution needed for detailing the fluvial depositional patterns necessary to identify subtle stratigraphic features.

Mr. Fogarty went on to explain that his recent reprocessing of existing 3-D seismic data using proprietary software and processes shows that 3-D seismic can be a valuable tool for placing fluvial sequences within an exploration context by seeing sedimentary features formerly thought to be sub-seismic in resolution. Following reprocessing and calibration with other geological data and with interpretive techniques, fluvial stratigraphic features such as differential compaction, sand and shale filled channels, levees and stratigraphic pinch-outs can clearly be seen in the seismic data. In conclusion, Mr. Fogarty explained that when seismic data is integrated with a complete subsurface data set, it is possible to create a sequence stratigraphic framework to use as part of a modern exploration program.

Fort Worth had no meeting in March, and encouraged its members to attend the national SIPES convention held this year in San Antonio.

We are very pleased that we have added several new members to our roster early this year in Fort Worth. A big welcome to Mark Smith and Dennis Gleason!

In addition to the benefits provided by national SIPES to members, the Fort Worth Chapter has purchased a computer presentation projector which is available to local members.

IN MEMORIAM

We regret to note the passing of the following members:

George G. Iles, #76 of Lake Charles, Louisiana who died on January 31, 2004

James W. McKee, #2377 of San Antonio, Texas who died on February 1, 2004

Jack W. Shirley, #2069 of Lafayette, Louisiana who died on March 8, 2004

The primary function of the projector is to support speakers’ needs. A great secondary function of the projector is to provide an additional benefit to members of the Fort Worth Chapter. For a nominal fee, members can arrange to utilize the projector on a day rental basis for their personal presentation needs. Also, our chapter is trying out an optional “pay in advance” dues structure. Members have the opportunity to pay yearly dues and then pay for each lunch when attended, or the second option to pay up front for yearly dues and lunches. Those members who chose to pay up front received the discount equivalent to one free lunch. The chapter voted this in to keep members from having to bring a check to each meeting, and to encourage regular attendance at meetings.

Phil Carlisle
Chairman
HOUSTON

The Houston Chapter’s meetings have been drawing record crowds for the first quarter of 2004. This is due to a combination of efforts. Past Program Chairman Scott Sechrist and current Program Chairman John Parrish have brought guest speakers with interesting topics to our luncheon meetings. Secretary Jeanne Fisher Mallick is sending email reminders to all members prior to the meeting reservation deadline, and Public Relations Chairman Pat McKinney is publicizing our meetings to other organizations. However, the real reason behind our higher attendance might just be the complimentary wine...

SIPES members packed the room in February to learn how to interpret AVO response in pressured deep shelf settings. Dr. Sam LeRoy presented his findings from analysis of thirty-eight deep GOM wells for which AVO analysis was performed. He concluded that responses occurring within or near pressure are very useful in predicting the presence of hydrocarbons, if you understand that the AVO gas signal is different from a non-pressure scenario. Inside the “wall” of a pressure “bottle” lack of anomalous AVO response may be indicative of gas, whereas a positive AVO response can indicate you’re looking at a potential dry hole. Sam works for EarthView Associates, a geology and geophysics consulting firm helping exploration companies open new plays.

March luncheon speaker Daniel Bendig, #2972, spoke on opportunities for the independent in the NW Appalachian Basin. Describing three under-explored plays in the Cambro-Ordovician of Pennsylvania and Ohio, he outlined the strengths and challenges of embarking on an exploration program targeting the Mt. Simon, the Knox, and the Trenton-Black River. The strengths include working an area of significant USGS-estimated undiscovered reserves; quality seismic; existing infrastructure; and savvy landowners amenable to industry. The challenges were the existence of shallow production that would need to be purchased, and areas of urban development.

At our March meeting, the chapter presented a gift certificate to Deborah Sacrey in appreciation of her work with SIPES. Since 1983, Deborah has volunteered her time and talents at both the local and national levels. She served as president of SIPES in 2001-2002, and also as president of the SIPES Foundation for two years. In Houston, Deborah has served as chapter secretary, treasurer, as well as public relations chairman and membership chairman. She generously provides the use of her office conference room for our monthly chapter board meetings.

Jeannie Fisher Mallick
Secretary
**MIDLAND**

The Midland Chapter kicked off 2004 with monthly lunch meetings in January and March. The annual spouse’s dinner was held in February. Because of continuing construction at Midland Country Club, the January meeting was held at The Petroleum Club. The speaker for January was Paul Simmons, president and sales manager for Quality Logging in Midland. He was assisted by David Watts, vice president of operations for Quality. They gave an informative talk on the history of hydrocarbon mudlogging showing the evolution of mudlogging equipment and techniques from the 1940s to the present followed by a discussion of the state of the industry today, and concluded with a look at where mudlogging technology is headed in the future. The presentation was an enlightening update on the state of mudlogging in the basin.

In February, the annual evening dinner for spouses was held at Midland Country Club. The weather was cold and snowy, but 140 hearty souls attended the entertaining evening. Music was provided by members of the Midland High School Orchestra and an after-dinner program was presented by Samuel Baron, electronic technician chief, submarines, United States Navy. Mr. Baron gave a humorous and informative talk entitled “Why We Still Patrol the Seas.” All in attendance were well entertained.

In March, the lunch meeting returned to Midland Country Club with Toby Shahan of Halliburton as the guest speaker. Mr. Shahan gave an informative talk on Halliburton’s new frac systems, CobraFrac and SurgiFrac. The tools are run on coil tubing and effective to depths of 7700 feet. These techniques allow stimulation for multiple zones in one run, but allow each zone to be fraced separately. The system is feasible in vertical as well as horizontal holes. Members and guests came away from the presentation well informed about these new and interesting techniques.

A new slate of officers has assumed their duties for 2004. Jack Naumann will serve as chairman, Marc Maddox as vice chairman, Greg Hair as secretary, George Friesen as treasurer and Bob Thompson as past chairman. All of the members thank Bob for his leadership and guidance over the past year.

---

**LAFAYETTE**

Our January meeting was highlighted by an interesting talk by Charles “Chip” McGinsey, regional archaeologist for southwest Louisiana. He spoke of some 15,000 years of human history in the state including Monroe’s Poverty Point and Marksville sites. He then touched on how his field impacts us in the oil and gas industry.

In February, our meeting was extremely interesting and informative. Don Briggs, president of LIOGA, presented a film which he shows to legislators. Some highlights were the $93 billion impact on our state, and the 320,000 jobs, direct and indirect, that the oil and gas industry supports. The presentation was an enlightening update on the state of mudlogging in the basin.

In February, the annual evening dinner for spouses was held at Midland Country Club. The weather was cold and snowy, but 140 hearty souls attended the entertaining evening. Music was provided by members of the Midland High School Orchestra and an after-dinner program was presented by Samuel Baron, electronic technician chief, submarines, United States Navy. Mr. Baron gave a humorous and informative talk entitled “Why We Still Patrol the Seas.” All in attendance were well entertained.

The March lunch meeting returned to Midland Country Club with Toby Shahan of Halliburton as the guest speaker. Mr. Shahan gave an informative talk on Halliburton’s new frac systems, CobraFrac and SurgiFrac. The tools are run on coil tubing and effective to depths of 7700 feet. These techniques allow stimulation for multiple zones in one run, but allow each zone to be fraced separately. The system is feasible in vertical as well as horizontal holes. Members and guests came away from the presentation well informed about these new and interesting techniques.

A new slate of officers has assumed their duties for 2004. Jack Naumann will serve as chairman, Marc Maddox as vice chairman, Greg Hair as secretary, George Friesen as treasurer and Bob Thompson as past chairman. All of the members thank Bob for his leadership and guidance over the past year.

---

**WELCOME NEW MEMBERS**

The following new members were approved by the SIPES Membership Committee from December 4, 2003 to March 18, 2004:

<table>
<thead>
<tr>
<th>SIPES Number</th>
<th>NAME</th>
<th>CHAPTER</th>
<th>SPONSORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2992</td>
<td>Edward A. Koeperich</td>
<td>Denver</td>
<td>H. Gruy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W. Goff III</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R. Thomasson</td>
</tr>
<tr>
<td>2993</td>
<td>Robert M. Altany</td>
<td>Midland</td>
<td>Reciprocal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CPG</td>
</tr>
<tr>
<td>2994</td>
<td>John D. Savage</td>
<td>Midland</td>
<td>F. Boyd</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D. Robbins</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>L. Rulla</td>
</tr>
<tr>
<td>2543</td>
<td>Steve R. Payton</td>
<td>Midland</td>
<td>R. Williamson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>J. Mays</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D. Griffin</td>
</tr>
<tr>
<td>2995</td>
<td>Dennis M. Gleason</td>
<td>Fort Worth</td>
<td>T. Bass</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R. Hensley</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B. Moulton</td>
</tr>
<tr>
<td>2996</td>
<td>Mark E. Smith</td>
<td>Fort Worth</td>
<td>T. Mayfield-Cowan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>K. Shirley</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>L. Petersen</td>
</tr>
</tbody>
</table>
My predecessor in this position breathed a big sigh of relief when he turned over the reigns to this organization. Bill Goff set a high standard during his term of leadership as president of SIPES. His dedication to this organization and commitment to the industry is exemplary. It makes me nervous to follow someone of his talent and passion. Thanks again Bill for your gift of time and energy to this great organization.

When I joined this organization almost 20 years ago, I saw it as an opportunity to network with some individuals that I held in high regard for their success in the oil and gas business, for their commitment to improve the standards and reputation of the industry, and for the respect with which they were held throughout the Corpus Christi Community. I was honored to be associated with this group.

Unfortunately, in the early days I failed to see the connection to the National Organization and how it might benefit me. I am embarrassed to confess that somewhere around 1987, Corpus Christi hosted the SIPES National Convention, and I failed to register or participate in the event. It’s funny how you can get sucked into being involved. Eleven years later I found that I was co-chair of the Corpus Christi Chapter’s next convention held in Durango, Colorado.

As my involvement in SIPES has increased, so has my awareness of the history and vision of this organization. As I have gotten to know those who have been our predecessors in leadership positions, my respect for these men and ladies has also grown. Their legacy is huge and extends far beyond SIPES.

Our industry is changing and so must this organization. In this regard, I have two major goals for the coming year: a) The first is that somehow our individual membership will begin to see themselves as a part of a national organization. (Don’t be like I was for the first few years of my affiliation). Diane Finstrom, the Board of Directors of SIPES and the SIPES Foundation are all working hard on your behalf. These are just a sample of the continuing endeavors which we are currently managing: Most Active Companies List, Prospect Generators List, Consultants Directory, Maintenance of the web page, certification of members and maintenance of ethics and standards, maintenance of a tape and video library, annual scholarships to geoscience students, preservation of historical log and well data, and providing education and seminars at the local and national levels.

The second goal is a continuation of Bill Goff’s vision. It is everyone’s hope that our National Convention will grow and in so doing will appeal and draw from a diversity of our membership. We are striving diligently to make next year’s convention in Santa Fe, New Mexico a great opportunity to gain knowledge that will enlighten and educate you from a technological standpoint and assist you in growing and managing your business in these changing times. (For me, one of the most stimulating talks at the San Antonio convention last month, was from an animated accountant, speaking about financial planning and tax accounting.) We also desire that the convention provide a great opportunity for networking and for fun. Next year we have a great convention site, right on the square in Santa Fe, New Mexico. Southwest Airlines flies into Albuquerque and from there you can rent a car to drive to Santa Fe. Please put the convention down on your calendar for April 27 through 30, 2005. We’ll see if the Chronicle forecaster was right and if oil has reached $50/bbl.

Being in this position is intimidating for me, and at the same time it promises to be a productive, busy and fun year. If you have suggestions that you feel would contribute to the advancement of SIPES, please feel free to contact me by phone at 361/887-6655 or 361/877-7557 or by e-mail at BCalhoun_HOI@SBCglobal.net. I truly desire your input. And thanks for the honor of serving in this position.

Respectfully submitted,
Brian Calhoun
THE BACKGROUND

Devon Energy is successfully developing the Barnett Shale in North Texas. The Barnett is a very low permeability naturally fractured reservoir that cannot be produced economically unless hydraulically fractured. The use of “light sand” or waterfrac treatments has considerably improved both the production performance and the economics in this reservoir. Because of its extremely low permeability, the drainage distance from a fracture face is very small. Fortunately, a fracture treatment in the Barnett is more likely to be very complex rather than simple – this allows a fracture “fairway” to be created during a treatment with many fractures at different orientations potentially contributing to production. Devon Energy and Pinnacle mapped numerous treatments in the Barnett and gained a better understanding about how these fractures grow and of the area contacted by the fracture fairways.

PINNACLE PERFORMS

Fracture mapping with surface tiltmeters and FracSeis Microseismic Mapping on 16 frac treatments in two fields determined that the primary (hydraulic) fracture orientation is NE to SW in this area. Additionally, the natural fractures in this area are oriented orthogonal to the primary fracturing (NW to SE) and these natural fractures may be activated (opened) during a hydraulic fracture treatment.

The length and width of the resulting fracture “fairway” is important in determining the extent of area contacted by the fracture so that subsequent well locations and spacings can be optimized. Because of the small drainage distance from a fracture, the density of fractures within this fairway is also important – there are opportunities for additional wells to be drilled in less densely fractured areas within a fracture fairway or for refracs to be performed that may extend the fairway or more densely populate it with new fractures.

(continued)
An example data set illustrates the complexity of fracture growth in the Barnett Shale. Surface Tiltmapping was used to determine the primary and secondary fracture orientation and the volume of fracturing slurry placed in each orientation. The wide rectangle in Figure 1 is the primary fracture length (downhole tiltmapping) and orientation (surface tiltmapping) while the “crossties” indicate the volume of fluid placed into the secondary (natural) fracture orientation with each crosstie representing 5% of total slurry volume (45% in the NW direction on this frac). The gray points represent microseismic events. The width of this fracture fairway is very wide, about 900’ across.

THE RESULTS

This fracture treatment is mostly confined within the Lower Barnett and the fracture fairway half-length is very long, of order 3000’. This fracture treatment covered the entire targeted pay and created a wide and complex fairway with fractures growing in multiple orientations. The dark ovals (see Figure 2) show frac geometry measured by downhole tiltmeters at the ends of the fairway while the gray data points are microseismic events measured by an array perpendicular to the center of the fracture fairway. The light area is the integrated fracture geometry from combining the highest confidence measurement for each fracture parameter – this geometry was used to create a calibrated 3-D FracproPT model for this area.

A new technique was developed to look at fracture growth with time. Small increments (in this case 40 events) of data are fit into a linear-regression model to determine the length and orientation of the many fracture structures as they are being created (see Figure 3).

The map view (Figure 4) shows the microseismic results from 7 mapped fracture treatments in the Lower Barnett.

Several “holes” in the fracture fairway are visible even accounting for observation well bias. These holes (or fairway “bunkers”) may be due to aseismic lithologies, or more likely, due to a lack of fracture network in these areas and thus be targets for refrac treatments or even new drilling locations in order to more completely drain this field. Combining fracture diagnostic technologies from different location perspectives is useful in ensuring that we “use all of the fairway” in the game of maximizing NPV.

kevin.fisher@pinntech.com
281-876-2323

Advance it Down the Fairway Continued
Seismic through Simulation

KINGDOM Software

GEOSCIENCE INTERPRETATION:
- All geoscience tools function off of one single executable program
- Benefit of truly integrated software is significantly improved interpreter productivity
- With the click of just one application the interpreter can instantly operate each of SMT’s geoscience modules

(RC)² Software

RESERVOIR MODELING:
- Accurately handles complexly faulted reservoirs
- Supports a wide variety of depositional environments
- Leverages full value of seismic data to create high-resolution reservoir models through quantitative integration of all available information (static and dynamic)

SURE Software

RESERVOIR SIMULATION:
- Solves black-oil and compositional problems
- Offers novel and unique features that enhance the possibilities of reservoir simulation
- PEBI™ (perpendicular bisector) gridding allows for more precise model building in a fraction of the time as compared to products using corner-point gridding

Seismic Micro-Technology, Inc. Houston +1 713 464 6188 Europe +44 20 8240 6524 www.seismicmicro.com
The SIPES Foundation gratefully accepts all donations and acknowledges these contributions with a letter.

Due to limited space in the newsletter, we are unable to list gifts under $26.
Foundation Donors Continued

Lee Higgins
Steve H. Hill
Marilyn Jones
In memory of James O. Jones
Richard R. Lindsly
Henry C. Magee
Don D. Matson
In memory of Grover E. Smith
Barney C. McCasland
Edward A. McCullough Endowed Fund
in memory of James V. Hardwick
Terry L. McLeod
Eric L. Michaelson
Harry A. Miller
Jesse Clay Moore
Stephen E. Collins Memorial Scholarship Fund
Frederick A. Overly
Elwin M. Peacock
Ronald W. Pritchett
John W. Raine, III
Dwight S. Ramsay
Perry O. Roehl
In memory of Jack G. Elam
H. Leale Slate
In memory of R. O. Lowe
Jeffry A. Smith
In memory of Sue Hirsch
Thomas J. Smith
William M. Smith Scholarship Endowment Fund
James D. Snyder
Marion E. Spitler
In memory of George Z. Scott
Scott A. Wainwright
Donald C. Wambaugh
Edward A. McCullough Endowed Fund
in memory of Thomas Schneider & Victor F. Vasicek
Robert W. Waring
Joe H. Warren, Jr.
Jerome M. Westheimer Scholarship Endowment Fund
George R. White Scholarship Endowment Fund

$26 - $49
John T. Abney
Tom J. Bass, Jr.
Orville R. Berg
Terry V. Bills, Jr.
Frederick M. Black
Ross E. Brannian
Wallace E. Brunson
Stewart Chuber
Arthur L. Cochrum
Stanley H. Collins
William R. Dixon
Stephen E. Collins Memorial Scholarship Fund
Toby Elster
Marvin A. Gibson
Monty J. Gist
Laurence E. Ginagy
Andrew S. Harper
James K. Hartman
Floyd E. Heard
Ross W. Hinton
Nolan Hirsch

Henry C. Libby
Roger D. Linder
Jack P. Martin
Douglas H. McGinness II
Patrick H. McKinney
William A. Miller
Robert J. Moffat, Jr.
Robert G. Murphy
Jerome J. O’Brien
Gary W. Palmer
M. Davis Payne
Hugh C. Pendery
Monroe J. Rathbone IV
Robert W. Richter
Jonathan B. Selby
Frank P. Sonnenberg
Joseph D. Stewart
Michael W. Taylor

Henry C. Libby
Roger D. Linder
Jack P. Martin
Douglas H. McGinness II
Patrick H. McKinney
William A. Miller
Robert J. Moffat, Jr.
Robert G. Murphy
Jerome J. O’Brien
Gary W. Palmer
M. Davis Payne
Hugh C. Pendery
Monroe J. Rathbone IV
Robert W. Richter
Jonathan B. Selby
Frank P. Sonnenberg
Joseph D. Stewart
Michael W. Taylor

Henry C. Libby
Roger D. Linder
Jack P. Martin
Douglas H. McGinness II
Patrick H. McKinney
William A. Miller
Robert J. Moffat, Jr.
Robert G. Murphy
Jerome J. O’Brien
Gary W. Palmer
M. Davis Payne
Hugh C. Pendery
Monroe J. Rathbone IV
Robert W. Richter
Jonathan B. Selby
Frank P. Sonnenberg
Joseph D. Stewart
Michael W. Taylor

Henry C. Libby
Roger D. Linder
Jack P. Martin
Douglas H. McGinness II
Patrick H. McKinney
William A. Miller
Robert J. Moffat, Jr.
Robert G. Murphy
Jerome J. O’Brien
Gary W. Palmer
M. Davis Payne
Hugh C. Pendery
Monroe J. Rathbone IV
Robert W. Richter
Jonathan B. Selby
Frank P. Sonnenberg
Joseph D. Stewart
Michael W. Taylor

Henry C. Libby
Roger D. Linder
Jack P. Martin
Douglas H. McGinness II
Patrick H. McKinney
William A. Miller
Robert J. Moffat, Jr.
Robert G. Murphy
Jerome J. O’Brien
Gary W. Palmer
M. Davis Payne
Hugh C. Pendery
Monroe J. Rathbone IV
Robert W. Richter
Jonathan B. Selby
Frank P. Sonnenberg
Joseph D. Stewart
Michael W. Taylor
2004-2005 Officers

President .........................................Brian S. Calhoun .............................................Corpus Christi
Vice-President ..................................Daniel M. Reynolds ....................................................Wichita
Vice-President of Natural Resources .............David A. Eyler ..........................................................Midland
Secretary .........................................Michael N. Austin .......................................................Denver
Treasurer .........................................Wendy G. Storbeck ...................................................Midland
Craig W. Adams ..................................State Legislative Affairs/Advertising ..................Fort Worth
Raymond N. Blackhall ..........................Environmental Affairs/Public Relations ............Houston
E. Bernard Brauer ..............................Professional Enterprise Management ..............Corpus Christi
Paul W. Britt ......................................APPEX Representative/Membership ..............Houston
William T. Goff III .............................Newsletter/Constitution/Strategic Plan .....................Denver
J. Don Haynes ......................................Directory/Honors and Awards ............................Austin
George S. Johnson ..............................At-Large Director ......................................................Amarillo
Pete J. Klentos ......................................Newsletter/Honors and Awards .........................Lafayette
Woodruff G. Leel, Jr. ............................Technology Communication .................................Dallas
Michael A. Pollok ..................................Prof. Society Liaison/2005 Annual Meeting ....Oklahoma City
Robert B. Robinson ............................New Chapter Initiatives .......................................San Antonio
J. Brian Walter .....................................Headquarters/Membership ..................................Dallas
James M. Zotkiewicz ............................Convention Committee Chair ..................................New Orleans

SIPES Vision Statement

To be the pre-eminent organization for furthering the professional and business interests of independent practitioners of the earth sciences. In achieving this vision, emphasis will be placed on (1) professional competence, (2) professional business ethics, and (3) presenting a favorable, credible and effective image of the Society.

Adopted by the SIPES Board of Directors
September 21, 1990

Return to:
SIPES
4925 Greenville Avenue, Suite 1106
Dallas, Texas  75206-4019

FORWARDING & RETURN POSTAGE GUARANTEED
ADDRESS CORRECTION REQUESTED