BULLETIN

KANSAS GEOLOGICAL SOCIETY

Volume 82 Number 1
January—February 2007

IN THIS ISSUE

Honorary Member Profile:
Thornton Anderson

Member Profile:
Wayne Lebsack

Geo-Scenes

Burrow Porosity in Limestones

Page 11
Mid-Continent: ARE YOU READY?

Exploration and development activity is on the rise. As you seek to capitalize on the industry’s momentum, don’t let well log data get in the way. No company has removed more barriers between people and their well log data than A2D Technologies. With coverage of all the crucial wells in the Mid-Continent, North America and hydrocarbon provinces worldwide, A2D will get you ready for the opportunities to come.

www.a2d.com
ON THE COVER:

Burrow porosity, which results from bioturbation during deposition is evident at this outcrop of the Winfield Limestone along the east side of US 77 just north of the town of Rock in Cowley County, Kansas.

CALL FOR PAPERS

The Kansas Geological Society Bulletin, which is published bimonthly both in hard-copy and electronic format, seeks short papers dealing with any aspect of Kansas geology, including petroleum geology, studies of producing oil or gas fields, and outcrop or conceptual studies. Maximum printed length of papers is 5 pages as they appear in the Bulletin, including text, references, figures and/or tables, and figure/table captions. Inquiries regarding manuscripts should be sent to Technical Editor Dr. Sal Mazzullo at salvatore.mazzullo@wichita.edu, whose mailing address is Department of Geology, Wichita State University, Wichita, Kansas 67260. Specific guidelines for manuscript submission appear in each issue of the Bulletin, which can also be accessed on-line at the Kansas Geological Society web site at http://www.kgslibrary.com

www.kgslibrary.com
ATTENTION

KGS MEMBERS

The 2007 KGS Banquet is scheduled for Friday, January 26th, 2007 at the Petroleum Club

Mark your calendars and plan to attend

Mark Your Calendars
AAPG Mid-Continent Convention

September 9-11, 2007
Wichita, Kansas
Airport Hilton Hotel and Convention Center

♦ Field Trips: The Oread Group in Eastern Kansas
♦ Kansas Underground Salt Mine Museum
♦ 3-D Seismic Short Course

For more information:
Kansas Geological Society
316-265-8676

MBC

WELL LOGGING & LEASING
UNMANNED GAS DETECTORS
MUD LOGGING
CERTIFIED INSTRUMENT TECH
SERVING THE KAN-O-TEC AREA SINCE 1990

AUSTIN GARNER MARLA GARNER
24-HOUR PHONE (620) 873-2953 MEADE, KANSAS

www.kgslibrary.com
The KGS Bulletin is published bi-monthly by the Kansas Geological Society, with offices at 212 North Market, Wichita, Kansas 67202. Copyright 2006, The Kansas Geological Society. The purpose of the Bulletin is to keep members informed of the activities of the Society and to encourage the exchange and dissemination of technical information related to the Geological profession. Subscription to the Bulletin is by membership in the Kansas Geological Society. Limited permission is hereby given by the KGS to photocopy any material appearing in the KGS BULLETIN for the non-commercial purpose of scientific or educational advancement. The KGS, a scientific society, neither adopts nor supports positions of advocacy, we provide this and other forums for the presentation of diverse opinions and positions. Opinions presented in these publications do not reflect official positions of the Society.
CAN YOU NAME THE CRITTER?

Sponsored by Trilobite Testing, Inc.

Is your paleo up to date?

If you know the name of the trilobite, submit your guess to Wes Hansen at 316-263-7313 or via e-mail at manager@kgslibrary.com. Remember that Trilobite Testing is sponsoring your efforts, so be sure to thank Paul Simpson the next time that you see him.

Bulletin committee members and PhD’s in Paleontology are prohibited from entering.

KGS Tech Talks

January

15: Don Strimpson—"Meteorites"

22: TBA

29: Ray Sorenson—“First Impressions: Petroleum Geology at the Dawn of the North American Oil Industry”

February

12: Dr. Walton & students, KU “Field Studies in Kansas”

19: Jim Bruggeman, Terracon, “General Environmental Compliance for oil & gas industry”


Attention!

New Location for Technical Meetings

All KGS technical presentations are held at 12:30 p.m. at the Wichita Bar Association, located at 225 N. Market, ground floor conference room, unless otherwise noted.

Note: For those geologists who need 30 points to renew their licenses, there will be a sign-in sheet at each presentation and also a certificate of attendance.
Dear Members,

I am hoping that 2007 will be a very quiet year with no major problems: the library business will be good, oil prices steady, personnel situation stable, a great new Walters Digital Library software will go operational and everyone will be happy. Throughout 2006 I have been teasing Chuck Brewer that he has to get all the hard things done: the new lease, the software, the reorganization and arrangement of the library space…all taken care of. You know what? He did. Many of the members have no idea how much time and effort he took away from his business and life to make things happen for us. We all owe him a standing ovation for his tireless effort and perseverance.

The accomplishments in 2006 are amazing. We have seen the digital library acquired by the Society with no drop in our capital reserves. We’ve been able to buy the new software with cash flow. These improvements are basically paying for themselves as it goes. The planning for the AAPG regional convention is moving forward via committees, staff and President–elect, Ernie Morrison’s work, Debbie Messinger FitzGerald’s fund raising and many other members who are working on it. The quality and quantity of talks provided by the tireless efforts of Bob Cowdry have been excellent. We need these for credits for the Professional Geologist members as well as all our own edification. I’d venture the talks we get would be the envy of many other societies. Thank’s Bob. So, hopefully we are going to glide through this year with no problems and the new President next year can receive the Society in as good condition as Chuck and this Board have handed it to me.

That’s about it for now. The Board and officers are always open to suggestions from members on what you want done. We look forward to hearing from you soon.

Respectfully Submitted,

Phil Knighton
Security for AAPG Members & Their Families Through Group Insurance

Life
Health
Dental
Disability
And Supplemental Plans

AAPG’s GeoCare Benefits Insurance Program
P. O. Box 9006
Phoenix, AZ 85068-9006
800-337-3140
E-mail: geocarebenefits@agia.com
www.geocarebenefits.com

ATTENTION!

INTERESTED IN BUYING CARD SETS, CABINETS, ETC.??

Larry Friend and Ted Jochems invite you to submit your e-mail address to an automatic notification list when such things come up for sale.

Contact: KGS Library
265-8676

The KGS welcomes you to submit your vacation photos of geologic interest. Submission of photos implies permission to publish in the KGS Bulletin. Please send your submissions with titles or captions and date of the photograph to Rebecca at the KGS Library by mail or e-mail:

Rebecca Radford 265-8676 manager@kgslibrary.com
212 North Market, Wichita, Kansas 67202

Deviils Tower
Location: NE Wyoming

The nearly vertical monolith, a phonolite porphery, rises 1,267 feet above the meandering Belle Fourche River. Once hidden below the earth’s surface, erosion has stripped away the softer rock layers revealing “Deviils Tower.”

On September 24, 1906, President Theodore Roosevelt proclaimed Deviils Tower as the nation’s first national monument.

Thanks to Tim Pierce for his vacation photos.
Dear Members,

We have a busy year ahead of us as we begin 2007. This is the year that we hold the AAPG Mid-Continent meeting in Wichita and plans are well underway for that event. Our chairman for the convention is Ernie Morrison, yes the same Ernie Morrison that you elected to serve as your president in 2008. Ernie has a great committee of people helping him with the plans for this event, Tom Funk is in charge of finances and Debra FitzGerald is finding sponsors, Larry Richardson is getting the vendor booths lined up, Paul Gunzelman is in charge of publicity, Doug Davis will be getting entertainment and planning social events, Technical programs will be chaired by the team of Bob Cowdery, Chuck Brewer, Rick Saenger & Lynn Watney; Sal Mazzullo and Mike Dealy will be organizing field trips, Wan Yang will chair Technical Posters, Linda Beauchamp is organizing guest & spouse activities, and Larry Friend is the Judges Chair. Ernie also has Alan DeGood, Fred James and myself to help where needed. As you can see, it takes a lot of people to make this event happen and we should thank all of those working so hard to make this a great convention. The meeting will be held at the Airport Hilton September 8—11. Please plan to attend.

We also will be going to Long Beach this year with a booth for the AAPG convention in April. Our plan is to be showing our new digital software which should be ready by early in the year (Feb.—March) and to be promoting the Mid-Continent meeting. If you plan to attend the Long Beach meeting, stop in at the booth and maybe you could give a little “booth time” if you are so inclined.

If you have not been by the Library recently, you might want to pop in and see the improvements. We have re-carpeted and painted and made some changes in the layout, thanks to our new building owners, Real Development. We were under construction a good part of October and below are some pictures showing the chaos……..but all is good now! Those of you who are daily users of the library, thanks for your patience.

Don’t forget to come to the Annual KGS Banquet on Friday, January 26th. We will be honoring Thornton Anderson this year as our Honorary. See the article on Thornton on page 14.

I am looking forward to working with Phil Knighton and his board of directors this year. We have a great board again and we should all thank these folks for taking the time to serve this Society. We can look forward to another prosperous year here at the library and I hope the same for all of you in the industry.

Respectfully submitted,

Rebecca Radford
Manager
Kansas Geological Foundation Items for Sale

Several sets of geological data and publications:

AAPG Bulletins, Shale Shakers, Mountain Geologist, Mining Engineering, Economic Geology

Kansas Completion Card Sets
Completion Card File Cabinets
Microfiche Readers ♦ Geology Books
Blue Line Printer
Logs and Data from several other states
Framed Pool Maps ♦ Wood Rolled Map Stand
Metal Rolled Map Stand and Cabinets

Looking for something?
Many more items are available

Inquire at KGS Library

~The TOP CHOICE for 3D SEISMIC~


PHONE (316) 636 - 5552  FAX (316) 636 - 5572
3500 N. Rock Rd., Bldg 800, Suite B
Wichita, KS 67226
paragon@paragongeo.com

KGS Library Open Late on Thursday Nights until 7:00 pm

This is an added benefit for:

♦ Geologists who have left the business to work elsewhere during downturns in the oil business
♦ Out of town members will now be able to maximize a trip to our library to do research, perhaps cutting a full day off of their visits

KGS Library Open Late on Thursday Nights until 7:00 pm

This is an added benefit for:

♦ Geologists who have left the business to work elsewhere during downturns in the oil business
♦ Out of town members will now be able to maximize a trip to our library to do research, perhaps cutting a full day off of their visits

~The TOP CHOICE for 3D SEISMIC~


PHONE (316) 636 - 5552  FAX (316) 636 - 5572
3500 N. Rock Rd., Bldg 800, Suite B
Wichita, KS 67226
paragon@paragongeo.com

www.kgslibrary.com
Editor’s Note: This new section of the bulletin will periodically feature scenes of geological interest in Kansas and from anywhere else in the world, or for that matter, on other planets in our solar system. All readers are encouraged to submit such images along with short, explanatory captions as illustrated below. Send all submissions via electronic format (images as jpegs, and separately, text in Microsoft Word or WordPerfect format) to the technical editor, Sal Mazzullo, at either salvatore.mazzullo@wichita.edu or dolomite@cox.net.

Burrow Porosity in Limestones

Limestones, which comprise hydrocarbon reservoirs throughout the world, typically have complex pore systems because of the common presence of more than one pore type in reservoirs. For example: (i) carbonate sands (grainstones) deposited in high-energy environments typically have particle-moldic porosity (e.g., oomolds, biomolds) as well as interparticle (intergranular) porosity; and (ii) carbonate muds, including phylloid algal reef limestones, often have vuggy pores and biomolds. Combinations of different pore types usually result in complex petrophysical properties of carbonate reservoirs. The most common pore types in limestones -- interparticle pores, particle-moldic pores, and some vugs -- are readily identifiable not only in outcrop samples and cores, but also in well cuttings samples, and they are routinely identified as such by wellsite geologists. Figure 1 shows another common pore type in limestones -- burrow porosity, which results from bioturbation during deposition. This example is from outcrops of the Winfied Limestone along the east side of US 77 just north of the town of Rock in Cowley County, Kansas. Note that the uppermost part of the Cresswell Member comprises essentially tight to very low-permeability limestones, whereas the immediately underlying zone is characterized by carbonate skeletal sands with interparticle pores and prominent, strongly vertically-oriented burrow porosity. Such burrow porosity obviously can be identified in outcrops and also in cores, but it is virtually impossible to identify in well cuttings as such.

Surface Structures

Mapping surface structures was a common, if not dominant, method of attempting to map subsurface structures in Kansas in the early to middle part of the 20th century; and many fields were found by this process. Figure 2 shows the north side of a relatively new (few years old) roadcut on 21st Street due east of the intersection of 21st St and Santa Fe Lake Road. The roadcut exposes gently-folded limestones in the Cresswell Member and immediately underlying calcareous shales and shaly limestones in the Grant Member, both in the Winfield Formation. Surface mapping in this area indicates that the gentle anticlines and synclines here plunge to the north, and subsurface mapping furthermore indicates that these surface structures reflect structure at depth.

Submitted by Sal Mazzullo
NOTICE

We have had very few members take advantage of the Thursday night hours for the last 6 months. Therefore we are going to cut the hours back to 7:00 PM instead of 9:00 PM and if we still don’t have people using the library at night we will most likely stop being open late on Thursdays. If you have an opinion about this, please let Rebecca hear from you.

FIRST IMPRESSIONS: PETROLEUM GEOLOGY AT THE DAWN OF THE NORTH AMERICAN OIL INDUSTRY
RAYMOND P. SORENSON
MONDAY, JANUARY 29, 2007

ABSTRACT

Petroleum, as a major commercial industry, exploded onto the world scene with the drilling of the 1859 Drake discovery well. Although the scale of business development exceeded all expectations, the existence of petroleum in Pennsylvania and elsewhere in North America was already well known within the scientific community. Oil and gas had been produced for decades as a byproduct from brine wells along the Ohio River valley, and commercial production of oil had begun two years earlier from hand-dug wells sited near major seeps, in Los Angeles and at Enniskillen in western Ontario, Canada. Extensive programs to assess the hydrocarbon yield of coals and bituminous shales were active throughout the 1850s, in support of established municipal coal gas manufacturing and the new and rapidly expanding coal oil industry.

Surface indications of petroleum are curiosities that naturally attract attention from those who encounter them. This included the scientists attached to governmental geological surveys of the 1830s, 1840s, and 1850s, whose reports were sprinkled with anecdotal descriptions of seeps and bituminous rocks. After the Pennsylvania boom materialized, these geologists were quick to publish their observations and ideas in more detail, and theories regarding structural trapping, the nature of source rocks, and the significance of thermal maturity for oil generation were widely debated. Although petroleum geology as a profession was insignificant until the early 19th century, the scientific framework upon which it developed was in large part a product of the first boom period of the 1860s.

BIO

Ray Sorenson received his B. S. degree in geology from Michigan State University in 1972 and his M.A. degree in geology from the University of Texas at Austin in 1975. He worked for Texaco from 1974 to 1975, and has been employed by Anadarko, in Oklahoma City and Houston, since 1976. The majority of his career has focused on the geology of the United States Midcontinent.
The Kansas Geological Society is developing new software to run the digital library. This new software will offer:

- A much more dynamic and faster interface
- Updated database (new wells will be added)
  - Open more than one well at a time
  - Open many documents at one time
  - Latitude & Longitude
  - Much More!

Call to arrange to see the demo for this new software.

Pricing of Digital Library Memberships:

- KGS Library Members = Can subscribe to the Walters Digital Library for $600.00 / year
- Non-KGS Library Members = Can Subscribe for $1500.00 / year

Call Now to Sign Up!!

Toll Free: 877-265-7300
Local: 263-2916
The time has arrived to honor a longtime member of the Kansas Geological Society, and one of its most distinguished.

Thornton is a native Kansan, born in Hutchison in 1923. His mother was Helen Wooddell of Nickerson and his father was Lind Anderson of Osborne County. Both of his father’s parents were Swedish immigrants who homesteaded in Osborne County.

He commenced attending school in Salina, but he moved to Wichita with his family when he was in the third grade. He completed all of his education in Wichita attending College Hill, Sunnyside and Roosevelt schools. He graduated from East High School in 1941. Following his graduation from East High School, Thornton enrolled at Wichita University. He then joined the Army Air Corps like his father before him. His first assignment was to a pre-meteorology program at the University of Minnesota. When the program was closed down, he was transferred to the Communications Officers program and received his commission at Yale University. He then attended a radar-training program at Harvard and MIT. After completion of this training he was assigned to Boca Raton Air Base, Florida. In January, 1946, he was discharged at Williams Air Base in Arizona.

Thornton re-entered Wichita University without a definite major in mind, but when he applied for a position at Gulf Oil he was hired by Anthony Folger. Under his influence, and others such as Virgil Cole and Bob Carmody, he elected to become a geology major.

In 1947 Thornton graduated from Wichita University, but realizing that he had a minimum number of hours in geology, he applied for and received a departmental fellowship in Geology at the University of Wisconsin, Madison. He was awarded a Masters degree from that institution in 1949.

While working on his degrees, he continued to work for Gulf Oil and accumulated the equivalent of one and one-half years of experience. When he graduated, he found that Gulf was unwilling to pay anymore to him than they would anyone with a Master’s degree without experience, so he decided to look elsewhere.

Thornton applied for and received a position with Skelly Oil in Midland, Texas. He worked for Skelly from June 1949 until December of 1950. Early in his career, he decided that some day he wanted to become an Independent. He decided that Wichita was one of the best locations to pursue that goal, so he joined Petroleum, Inc in Wichita, remaining with that company until May of 1951 when he left for a position with more potential at Lion Oil Company. After “Polly” Clark left Lion, Thornton was promoted to District Geologist and later Regional Geologist as the company expanded.

In 1955, Thornton reached his goal of becoming an Independent. He remained an Independent until 1962 when he and Bob Watchous formed a very successful
company, High Plains Production. High Plains was dissolved in 1969; Thornton then resumed his role as an independent operator. In 1981 his son Bill joined the firm and in 1988 they formed Anderson Energy Corp. One item involving Anderson Energy of which Thornton is particularly proud is that they did possibly the first 3-D seismic in Western Kansas in Thomas County in 1993.

Besides Bill, Thornton has four other children: Joe, a lease broker in Bakersfield, California; Earl, who does architectural work in Denver; Amy, who manages a Ladies High Fashion Department for Saks Fifth Avenue; and Mary, who works for a fixed base operator at Aspen Airport.

Thornton has served his profession and industry well. In 1955 he was Vice-President of the Kansas Geological Society, an organization of which he has been a member for 59 years. He has been President of the Kansas Geological Foundation and the Petroleum Club. For the AAPG he has served as a Delegate to the House of Delegates and as a Trustee Associate of the Foundation of the AAPG. His membership in the AAPG now spans fifty-five years. He has been a director of KIOGA for over 20 years as well as serving as Secretary. He also has been a member of SIPES, IPAA, and IOGCC.

He has a great record of community service having served several terms on the Board of Directors of Episcopal Social Services (Venture House) where his wife Kathleen works as a counselor. He has also been on the Board of Breakthrough Club, a private agency geared to returning individuals with mental problems to the mainstream. At his church, St. Stephens Episcopal, he has served several terms on the Vestry and is a former senior warden (highest position available to a lay person).

Among the honors that Thornton has received in the past are election to the Hall of Fame at the Kansas Oil Museums in El Dorado and Great Bend.

This has been a short version of the life of one of the most successful of the Kansas Geological Society’s members. It is certainly a well-deserved honor.

---

**Gift to Wichita State University**

The Claud L. Sheets Jr. Trust has made a gift of more than 1.1 million dollars to Wichita State University. The money will create an endowed fund to finance graduate scholarships in the majors of earth, environmental and physical sciences, or in biology with an emphasis on environmental studies.

Claud was a petroleum geologist in Wichita for 34 years and was President of the Kansas Geological Society in 1982. Claud graduated from Wichita University in 1950 and after finishing his career, he and his wife retired to the Ozarks. Claud died in 2002.

---

**New Venue for Kansas Geological Society Technical Programs**

Due to prohibitive fees for use of the Bank of America Auditorium, where the KGS has met for so many years, it was necessary to relocate.

Our new President, Phil Knighton, geologist/attorney, was able secure the use of the conference room at the Wichita Bar Association Law Library just across the street from the KGS Library and Society office.

This is an excellent facility that should accommodate, in essentially all cases, the attendees at our technical programs. Programs in this new location will commence in January 2007.
MEET THE NEW OFFICERS

2007-08 Election Results

Ernie Morrison
President Elect

Rick Saenger
Secretary– Treasurer

Robert Stolzle
Member At Large

2007 KGS Board of Directors

President—Phil Knighton
President-Elect—Ernie Morrison
Secretary—Rick Saenger
Treasurer—Doug Davis

Directors:
Chuck Brewer
Beth Isern
Robert Stolzle
With the passing of Frank Hamlin on October 28, 2006, the Society lost a fifty year member and the industry and profession lost another of its true professionals. Frank was born in Pawhuska, Oklahoma on March 27, 1926. He was the youngest of four brothers. His brothers Bernard, Clarence and Maurice are all deceased.

He attended grade school and high school in Pawhuska. Following high school he attended the University of Oklahoma for two years and then Oklahoma A & M, now Oklahoma State, for two years, graduating in 1950. During World War II Frank enrolled in the cadets, but was not called to active duty.

In 1950 Frank began his employment with CRA, which lasted approximately five years. Frank married Louise Alyward in 1952. Louise and Frank had four children: Debbie, a nurse; Kenneth, a geologist, now employed in sales; Chris who lives in Russell; and Gregg, now residing in Augusta. There are seven grandchildren and 3 great-grandchildren.

Frank and Louise moved to Wichita in 1956 where Frank was employed by Ted Leben, an Independent Operator. In 1962 Frank returned to Great Bend where he was a consultant for two plus years. He moved back to Wichita in 1965 and joined Alyward Drilling Company, later serving as General Manager. In 1985 he formed Hamlin Oil Operations.

Frank joined Kansas Geological Society in 1955 and remained a member until his death. He also was a member of American Association of Petroleum Geologists and Society of Independent Professional Earth Scientists.

His wife Louise describes him as a quiet man, but with a good sense of humor. He was very honest and loved his work. He liked to play golf, but in fact enjoyed all sports. He and Louise were involved quite early in the Junior Golf Foundation. Frank was active in this Foundation for the rest of his life. Frank was well-liked by all who knew him and he will be missed by all his friends and acquaintances.

A Memorial Letter from Jim Robinson

My first knowledge of Frank Hamlin was during the 40’s, during our high school years. I attended Nowata High School and Frank was on the Huskies football team. I did not play against Frank, but the Nowata players had a great deal of respect for Frank’s ability. As I recall Frank was the quarterback.

In 1947, I was business manager for the C.R.A. softball team. They wanted to have the best players and have an outstanding team. It was my job to hire the players. I had heard of a player on the Redipump team in Bartlesville, Oklahoma who was suppose to be outstanding. The State Tournament was going on and I went to watch the Redipump play and found Frank to be a player that every team would dream of having. He played 3rd base and no ball got past him. His throwing was very accurate and he was great at bat. He was not a long hitter, but a very consistent hitter.

I hired Frank and he moved to Great Bend and worked as a Swamper on a truck. He worked long hours and made good money for those days. After a period of time, in reviewing his application, I was surprised to learn that he had a degree in geology. I inquired as to why he was not working as a geologist and he explained that, at this time, there were a large number of geologists and it was very difficult to get a job. Therefore, he just applied for work and took what he could get. I arranged to have Frank promoted to the

(Continued on page 19)
Wayne graduated from Colorado School of Mines in 1949. Among his classmates were Jim Daniels, Walter Martz, and Warren O. Johnson. A favorite professor was Dr. L. W. LeRoy who compiled the widely used book “Subsurface Geologic Methods.” After Wayne graduated from the School of Mines in 1949 he continued in graduate school until 1951.

In 1951 Wayne married Patricia Beeley of Denver, Colorado with whom he had three children: Amy, now living in Germany with her husband who is in the military; Careth, a school teacher in Denver; and Mark, who died in 1988. Pat and Wayne moved to Lyons, Kansas in 1951.

Lebsack Oil Production was formed in the 1950’s by Wayne, along with his Father, Carl, and Rex Curtis. Wayne’s father died in 1968 but Wayne continued in the oil industry. His successful career has included discoveries in Rice, Stafford, Gove, Seward, Finney, Kearny and Scott Counties. During his career, Wayne believes that the professional who influenced him the most was F. G. “Sandy” Holl. As all geologists do, he was faced with some challenging wells in his career, one in particular that he recalls was the Settles #1 in Logan County where he was lost from top to T.D.

In the 1970’s he was involved with a law firm in Great Bend doing hydrologic studies of ground and surface water quality and pollution. In 1984 he joined the Nature Conservancy and was a prime mover in the establishment of the Kansas Chapter of the Nature Conservancy. At the 2001 annual meeting of this organization, he was named one of the 50 “Heroes,” one from each state, for leadership in conservation efforts during the past 50 years. In line with his activities in the Nature Conservancy, a goal which he would like to achieve is a “better understanding between Environmentalists and Developers.”

Wayne co-authored a publication of the Kansas Academy of Science entitled “Flint Hills Springs” with Rex Buchanan and Bob Sawin of the Kansas Geological Survey.

Professionally, Wayne has been very active. As previously mentioned, he has been a member of the KGS for over 50 years, and a member of the AAPG.
for 57 years. He has also been a member of SIPES, KIOGA, and the Environmental Committee of the Interstate Oil Compact Commission.

Among the honors that Wayne has received was election in 2001 to the Kansas Hall of Fame of the Oil and Gas Museum of Great Bend. He has also served on the City of Lyons Council where he was instrumental in developing a solid waste program for Lyons and Rice County. In the past he was active in the Boy Scouts and served the Presbyterian Church in Lyons as an Elder for twelve years.

It is obvious from his answer to the question “what do you plan to do in your retirement years” that he doesn’t plan to retire when he states “mapping and drilling Kansas prospects and stewardship with the Nature Conservancy.” From all of his answers it comes across that he has been an individual who really enjoyed his remarkable and successful career as a Petroleum Geologist, Hydrogeologist, etc. and would follow the same path, if he had it to do over.

New Venue for Kansas Geological Society Technical Programs

Due to prohibitive fees for use of the Bank of America Auditorium, where the KGS has met for so many years, it was necessary to relocate.

Our new President, Phil Knighton, geologist/attorney, was able secure the use of the conference room at the Wichita Bar Association Law Library just across the street from the KGS Library and Society office.

This is an excellent facility that should accommodate, in essentially all cases, the attendees at our technical programs. Programs in this new location will commence in January 2007.

During Frank’s years in Great Bend he met Louise, a lovely girl, and they were married. This marriage lasted until Frank passed away this year.

After his promotion with C.R.A., the superintendent decided that Frank should have some knowledge of the oil patch and worked him on several jobs to learn the function of each position. Frank got along well and learned a lot with the exception of one incident. On the McFadden Lease in Pratt County, Frank supervised the hooking up of a wellhead on a gas well. When he reported in at the completion, the superintendent found, to his dismay, that Frank had installed a bull plug instead of a regular valve and gauge. It was Frank’s job to return to the well and with another man remove the plug. They put a pipe wrench securely on the plug valve and extended the wrench with a length of pipe. They then laid low on their stomachs and slowly and cautiously removed the plug valve. The least spark would ignite a gas well. To this day, nobody knows where the plug valve went, but Frank was very careful in his use of bull plugs from that day on. After the training period, Frank went on to become a very fine geologist.

We worked in the Wichita office in the 50’s and lived only a few blocks from each other. In later years, Frank worked for Aylward Drilling Co. and I worked for Chief Drilling. We played many jokes on each other and always got along great. Unlike me, Frank was a very fine golfer. He was a natural athlete and this carried him well in his golf game. We played in a KIOGA golf tournament and Frank beat me by at least 15 strokes. Later, Frank and I were seated at a table with our wives when they announced that the handicap was to remove all eights from your score. I proceed to get first place and receive a trophy that was so big I could hardly carry it. Frank led the foot stomping and booing. This too was never forgotten.

I have always considered Frank a very special friend. He was always there for me in the good times as well as the bad. I will miss him greatly –

Jim Robinson
New DVD’s added to the Kansas Geological Foundation Library

Flood of the Millennium: Discovery Channel
This DVD describes the flood and the results thereof that occurred in 1997 in the Red River Valley of North Dakota.

Unfolding Universe: Discovery Channel
This DVD reconstructs the history of the galaxy including its birth 15 billion years ago.

The Elegant Universe: Discovery Channel / Nova
Describes Newton’s work concerning gravity, Maxwell’s combined theories of electricity and electromagnetism, and the later work of Einstein.

Ultimate Guide—Volcanoes: Discovery Channel
Discusses the eruption of the volcano in Ecuador in 1999 and the volcanic eruption at Montserrat in 1997.

Volcanoes of the Deep Sea: Discovery Channel
Explores undersea volcanic habitats filled with strange creatures and landscapes.

Earthquake Storms: Discovery Channel
Delves into the theory that one earthquake may trigger one or more additional quakes. Uses Turkey as an example and warns that there may, in the future, be an earthquake in the Istanbul area that would affect as many as 15 billion people.

Super Volcanoes: Discovery Channel
A fictional story of the eruption of a volcano under Yellowstone and the events leading up to it.

Tsunami: Discovery Channel
Account of the tsunami in 2004 that was the result of an earthquake off the coast of Indonesia that became the worst natural disaster in human history, killing 250,000 people and affecting 13 countries. Warns of a possible tsunami resulting from an earthquake off the coast of Washington that would strike the coasts of Canada, Washington, Oregon and California.

360 Degrees of Mesa Verde, Virtual Tour-Four Chambers
45 interactive 360 degree panoramic views of the archaeological sites at Mesa Verde. Also includes views of the Mesa Verde formation.

If you want to check any of these out contact Janice Bright at the Kansas Geological Society/Library 316-265-8676. Your only cost is returning them to the Library.

ADVERTISER’S DIRECTORY

A2D Technologies 2
Abercrombie RTD, Inc 21
Allied Cementing Company, Inc 21
Duke Drilling 21
GeoCare Services AAPG 8
Greensburg Oilfield Service 21
Kansas Geological Foundation 26
Landmark Square 4
Lockhart Geophysical 21
LogSleuth 29
MBC 4
Murfin Drilling Company, Inc 21
Olsson Associates 10
PARAGON Geophysical Services, Inc 10
Petrobase 21
Professional Directory 22
Sunrise Oilfield Supply 4
Trilobite Testing 6
Walters Digital Library 13
Weatherford 31

ADVERTISER’S RATES: 2006

<table>
<thead>
<tr>
<th></th>
<th>B&amp;W</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 issues</td>
<td>$2,000</td>
<td>$2,500</td>
</tr>
<tr>
<td>3 issues</td>
<td>$1,080</td>
<td>$1,325</td>
</tr>
<tr>
<td>1 issue</td>
<td>$480</td>
<td>$525</td>
</tr>
<tr>
<td>1/2 Page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 issues</td>
<td>$1,000</td>
<td>$1,500</td>
</tr>
<tr>
<td>3 issues</td>
<td>$540</td>
<td>$825</td>
</tr>
<tr>
<td>1 issue</td>
<td>$225</td>
<td>$350</td>
</tr>
<tr>
<td>1/4 Page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 issues</td>
<td>$600</td>
<td>$900</td>
</tr>
<tr>
<td>3 issues</td>
<td>$325</td>
<td>$525</td>
</tr>
<tr>
<td>1 issue</td>
<td>$150</td>
<td>$250</td>
</tr>
<tr>
<td>1/8 Page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 issues</td>
<td>$300</td>
<td>$500</td>
</tr>
<tr>
<td>3 issues</td>
<td>$175</td>
<td>$325</td>
</tr>
<tr>
<td>1 issue</td>
<td>$75</td>
<td>$185</td>
</tr>
</tbody>
</table>

Full page, 1/2 page and 1/4 page ads receive an ad space in the KGS Directory at no additional charge.

www.kgslibrary.com
Kirk Rundle
Consulting Geophysicist
3D Seismic Design, Acquisition to Processing QC., Interpretation and Analysis, Subsurface Integration
7340 W. 21st. N., Ste. 100
Wichita, Kansas 67205
Office: 316-721-1421 Fax: 316-721-1843
Home: 316-721-8962 Email: krundle@swbell.net

ROGER L. MARTIN
Independent/Consultant Petroleum Geologist
200 East First Street, Ste. 405
Wichita, Kansas 67202
Office 316-267-0032/Cell: 316-250-6970
Fax: (316) 264-8686
Email: rogermartingeo@sbcglobal.net

DON V. RIDER
Consulting Petroleum Geologist
Well Site Supervision
Geological Studies
Completions
8910 W. Central Park Ct.
Wichita, KS 67205
Office PH: 316-729-4445 Cell PH: 316-706-7199

ALFRED JAMES III
Petroleum Geologist
Kansas - Colorado - Alaska
SIPES #1111
Wichita, Kansas 67202
Off: (316) 267-7592

M. Bradford Rine
Honorary Life Member—Kansas Geological Society
Licensed Geologist—KS. #204
Registered Professional Geologist—Wyo. # 189
Certified Geologist—A.A.P.G. # 2647
S.I.P.E.S. # 1584 S.P.E. #109833-4
PROSPECT EVALUATION • PROSPECT GENERATION
WELLSITE SUPERVISION • EXPERT TESTIMONY • OPERATIONS
PROPERTY EVALUATION • RESERVOIR STUDIES
DRLG./COMP. CONSULTATION
Suite 415
108 S. Main
Wichita, KS 67202
Office: (316) 262-5418 Cell: (316) 722-6829
Fax: (316) 262-5418

WESLEY D. HANSEN
Consulting Geologist
Well site Supervision
Geologic Studies
212 N. Market, Ste 257
Wichita, Kansas 67202
Off: (316) 263-7313
Mobile: (316) 772-6188

ROBERT J. GUTRU
Geologist
300 Farmers & Bankers Bldg.
200 East First Street
Wichita, Kansas 67202
Off: (316) 265-3402

Kevin L. Kessler
Independent/Consulting Petroleum Geologist
Well Site Supervision & Geologic Research
Oil & Gas Prospects
Kansas & Eastern Colorado
Mailing Address Phone
1199 N. Ponderosa Rd. Res.: (316) 522-7338
Belle Plaine, KS 67013 Mobile: (316) 706-6836
Email: kkessler1199@aol.com

Promote Yourself!
Buy an AD space in our Bulletin
www.kgslibrary.com
Help Wanted!
Integration Project

If you have any time you could give to the Library, we have projects that could move a little faster with some Expert Professional Geologists.

Just a few hours a week would make such a difference.

To volunteer, please contact Ted Jochems or Rebecca at the Library 265-8676.

The on-line bulletin is now in pdf Format

Check out the complete KGS Bulletin on our web site www.kgslibrary.com

A simple way to help your Society save money would be to let us know if you like viewing the Bulletin on line. This would allow us to reduce our mailing & printing costs of sending the Bulletin to every member.

We are glad to keep mailing it to you but if you are satisfied with reading on-line, please just let us know.

316-265-8676
1) New Cherokee oil production has been produced in the Stratford Southwest Field in Logan County by Shakespeare Oil Company of Salem, Illinois.

The Frey #3-15, located in the SW/4 of section 15-T13s- R32W, started producing oil new pay from the Johnson Zone on October 30, 2006. Shakespeare Oil discovered the Stratford Southwest Field in January this year. The Frey No.1-15, NW/4 of the same section, was completed with Lansing-Kansas City oil production. No details have been released. Field area is located thirteen and one-quarter miles south of Oakley, Kansas.

2) New Marmaton (Fort Scott limestone) oil reserves have been discovered within the boundaries of the recently established Rap South oil field,

which was found earlier this year by John O. Farmer, Inc. of Russell, Kansas. The Ness County field had previously produced oil from the Mississippian formation only. Farmer has successfully completed the No. 1 Mishler 'E', located in the SW/4 of section 14- T17s- 25W, for an undisclosed production rate. The 4485 ft. deep well started producing Fort Scott oil on Augusta 25, 2006 at site located about four and one-half miles southwest of Arnold, Kansas. Operator has completed three wells in the new pool thus far.

3) Ritchie Exploration, Inc., Wichita, Kansas, has discovered new oil deposits over two and one-half miles from the Willroads Field in Ford County.

Operator has completed the #1 Carson 20B, spotted in the NW/4 of section 20-T27s- R23W, for an undisclosed daily production rate. The well was drilled to a total depth of 5900 ft. but hole has been plugged-back to a depth of 5091 ft. The producing formation is unknown. Ritchie Exploration has also completed two offsets to the north in section 17 to date and has staked several other locations further north to drill in the same section. Producing horizons in nearby oil fields include the Marmaton, Cherokee
and Morrow zones. Field area lies six and one-half miles northwest of Ford, Kansas. The new field has been named Carson.

4) A new Viola oil discovery has been reported in western Kingman County, near the Barber County line, by Wichita-based Dixon Energy.

Operator has completed the #1 Rolf Land, SE/4 of section 18- T30s- R10W, for 30.52 barrels of oil per day. The well was actually drilled in November, 2003 but was not put on the pump until October, 2005. Completion details have not been reported. State production records show the well has produced 9,229 barrels of oil during the first two months on pump. The remote wildcat well lies nearly four miles from closest known production in the Nashville Southwest Field (Admire gas), about one and one-half miles west of the town of Nashville, Kansas. The new field has been named Barkin.

5) Independent producer Carmen Schmitt, Inc., of Great Bend, Kansas, has discovered new oil reserves with the successful completion of the Fullmer #2, a remote wildcat well located in the SW/4 of sec 27-T16s- R28W in Lane County. The well is pumping an undisclosed amount of oil from the Lansing-Kansas City as of the end of October. Well site is situated over two miles from closest production in the Shields Townsite and Tillotson Fields, where the Lansing-Kansas City, Cherokee and Marmaton formations give up oil. The new Drift Fence field lies two miles northeast of Shields, Kansas.

6) Great Plains Energy, Inc., of Wahoo, Nebraska, has discovered oil deposits at the Shulte #1, located in the NW/4 of section 16-T2s- R25W in Norton County.

The wildcat well is producing an undisclosed amount of oil at site two miles north and three-quarters mile east of Norcatur, Kansas. Production zone is unknown. The Rockwell pool opener was drilled five-eighths mile north of Mull Drilling Company's #1 Breiner that tested oil shows in several Lansing-Kansas City zones in 1996. The Shulte well was drilled to a total depth of 3836 ft. and was targeted to reach the Granite. Closest known production lies over five miles away in the multipay Thirty-Six oil field where the LKC, Gorham Sand and Reagan Sand have all produced oil.

7) Downing-Nelson Oil Company, Inc., of Hays, Kansas, has used seismic data to locate and establish two new oil fields in Trego County.

First, the Elsie #1-12 has been completed for 45 barrels of oil per day in the SW/4 of section 12- T13s-R22W. The 4108 ft. deep well is producing commingled oil from perforations in the Lansing-Kansas City from 3665 to 3669 ft. and the Arbuckle from 3991 to 3995 ft. The well is isolated from production found over one-half mile to the northeast in the Ogallah South Field. The new field has been named Elsie. In the NW/4 of section 13- T13s-R22W, Downing-Nelson Oil has also completed their Leland #1-13 for 45 barrels of oil per day to establish the LeLand Field. The well found productive Lansing-Kansas City zone from 3628 to 3632 ft. Total depth of the well is 4108 ft. Site lies three-quarters mile southwest of the Ogallah South Field, about four miles south and one-half mile east of Ogallah, Kansas.

---

New Venue for Kansas Geological Society Technical Programs

Due to prohibitive fees for use of the Bank of America Auditorium, where the KGS has met for so many years, it was necessary to relocate.

Our new President, Phil Knighton, geologist/attorney, was able secure the use of the conference room at the Wichita Bar Association Law Library just across the street from the KGS Library and Society office.

This is an excellent facility that should accommodate, in essentially all cases, the attendees at our technical programs. Programs in this new location will commence in January 2007.

www.kgslibrary.com
A not-for-profit educational and scientific corporation

GOALS:
- promote geology and earth science
- preserve geological records
- establish memorials and endowments
- support field trips and seminars
- financial aid and grants to students

PLEASE HELP SUPPORT THE FOUNDATION

Kansas Geological Foundation Services

The Kansas Geological Foundation provides the following services as a part of the organization’s commitment to educate the public regarding earth science.

Speaker's Bureau
A list of speakers available to talk about various aspects of geology may be obtained by contacting Janice Bright at the KGS Library, 265-8676. This service is free to the public.

Videotape Library
The KGF maintains a videotape library focused primarily on the various fields of earth science. These tapes may be checked out without charge by the public. To obtain a list of tapes, please contact the KGS Library, 212 N. Market, Ste. 100, Wichita, KS 67202, or call Janice Bright at 265-8676.

The Kansas Geological Foundation was founded in March, 1989 as a not-for-profit corporation under the guidelines of section 501(c)(3) of the tax code to provide individuals and corporations the opportunity to further the science of geology. It is dedicated to providing charitable, scientific, literary and educational opportunities in the field of geology for the professional geologist as well as the general public.

KGF can receive in-kind donations through which the donor may receive a tax deduction. Of equal importance, the KGF provides the financial resources to sort, process and file this data at the KGS library. If you have a donation to make, please contact the KGF at 265-8676.

Your tax-deductible membership donation helps to defray the cost of processing donations and to support public education programs about the science of geology. Annual membership begins at $50.00 per year. Donations of $100.00 or more are encouraged through the following clubs:

<table>
<thead>
<tr>
<th>Club</th>
<th>Donations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Century Club</td>
<td>$ 100 to $ 499</td>
</tr>
<tr>
<td>$500 Club</td>
<td>$ 500 to $ 999</td>
</tr>
<tr>
<td>Millennium Club</td>
<td>$1000 to $5000</td>
</tr>
<tr>
<td>President's Club</td>
<td>$5000 and over</td>
</tr>
</tbody>
</table>
The Kansas Geological Foundation has awarded the following 12 Kansas students $1,000.00 scholarships for Spring Semester 2007:

Kallie Moore, Emporia State  
James Musgrove, Emporia State  
Vilma Perez, Ft. Hays State  
Brian David, K-State  
Nathan Cless, K-State  
Drew Evans, K-State  
Kody Kramer, K-State  
Kwan Yee Cheng, KU  
Shelby Walters, KU  
Ganganath Koralegedara, Wichita State  
Nicholas Reichart, Wichita State  
Tonya Scott-Lille, Wichita State

New Board members elected by the membership for three year terms are:  
Todd Aikins, Bryce Bidleman, and Raul Brito

Selected by the Board as officers are:  
Ken Dean, President  
Steve Frankamp, Vice-President  
Todd Aikins, Treasurer  
Raul Brito, Secretary

Others continuing on the board are:  
Bob Cowdery  
Thornton Anderson  
Tim Hellman

This is a very detailed account of one of the outstanding educators in geology of recent times. Dr. Laudon, after receiving his BS., MS., and PhD degrees from the University of Iowa in 1928, 1929, and 1930 respectively, taught for eleven years at the University of Tulsa, seven years at the University of Kansas and 27 years at the University of Wisconsin – Madison.

Fred James credits Dr Laudon with being the reason he is a geologist and writes, “Dr. Laudon was one of the great teachers, so say his students. Among them are Dan Merriam, Bill Hambelton, Tim Carr, Thornton Anderson and myself, and I probably omitted some. He taught at Tulsa University, University of Kansas, and at Wisconsin where he was my professor, faculty advisor, mentor and field party leader. The man was charismatic, ornery, a superb motivator, and one heck of a scientist. Some of the stories are just hilarious.”

This book has been donated to the Kansas Geological Society Library by Fred James
Rodney Sweetman was a pillar of the drilling industry and one of the most affable individuals to be found around the “oil patch.” Rod was born December 24, 1931 in Oklahoma City, Oklahoma. The family moved to Kansas where Rod attended grade school and high school in Great Bend, graduating in 1950. In high school, Rod played football, receiving all-state honors for two years. During this early period in Kansas the family also lived in Sterling and St. John.

Rod served in the Army for two years, primarily in the Motor Pool at a base in California. In 1954, Rod married Geneva Kreutzer, a girl he met at Great Bend High School, on the army base in El Paso, Texas. Rod and Geneva had four children: Tracy, now deceased; and Suzanne, Sarah, and Adam, all residing in Wichita. Their children blessed them with eight grandchildren with the last expected in the spring of 2007. Rod worked for Boeing after his discharge from the military. He had security clearance that allowed him to fly to various Strategic Air Command bases.

After attending both Ft. Hays State University and Wichita University, Rod graduated from WU. After earning his degree in Mechanical Engineering, Rod continued working for Boeing. In 1954 his father asked him to help start a drilling company. They founded Sweetman Drilling with only one rig and over the years expanded to a multiple rig operation. Of course, such enterprise is not without risk, and two rigs burned during the course of their drilling operations, including one in Sumner County.

With the cessation of drilling operations, Rod continued as an active investor in drilling prospects. He had been an Associate Member of the Kansas Geological Society since 1978 and often attended technical programs held by the KGS. He was also a member of the Society of Petroleum Engineers.

Rod was very active in community affairs. He served on the Wichita Crime Commission, the Board of the Kansas Independent Oil and Gas Association, and the Petroleum Club Board. Rod was a dedicated member of St. Francis Catholic Church.

One of the activities that Rod particularly enjoyed was “eating out” which he did practically every evening. His son Adam says that wherever he dined, Rod always knew the names of the hostesses and all of the waitresses and would often bring the ladies a box of candy. Some excerpts taken from the Mortuary electronic guest book illustrate this:

“All the people at the Scotch and Sirloin would like to send our respect and love to Mr. Sweetman and his family. He always had a smile and a laugh for everyone and we will miss his smile around here. Sincerely, Management and Staff of the Scotch and Sirloin.”

“Rod was one of the sweetest men I have ever known. He was always so kind and thoughtful. Rod would take us girls at McCoy Petroleum out for a special lunch on secretaries day & bring us chocolates for Valentine's Day. He always made us feel appreciated. He made us laugh. I will miss him.”

Dianne Howard-Bassham

Adam remembers that his dad was always armed with a new joke and a ready laugh. Rod distributed a lot of the funny material via E-mail; He used the computer more for a humor delivery device than anything functional for professional purposes.

Rod wished for memorials given in his honor to go to the Guadalupe Clinic, one of several organizations he loyally supported for many years. This clinic supplies medical assistance and medications to those individuals who are below the poverty level, if they are unable to pay for these services.

Rod Sweetman and his friendly smile and gregarious nature will be missed by those both in and around the industry.
<table>
<thead>
<tr>
<th>KGF Member</th>
<th>Date Deceased</th>
<th>Memorial Established</th>
<th>KGF Member</th>
<th>Date Deceased</th>
<th>Memorial Established</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan Bowles</td>
<td>09/89</td>
<td>1990</td>
<td>Warren E. Tomlinson</td>
<td>01/00</td>
<td>2000</td>
</tr>
<tr>
<td>John Brewer</td>
<td>10/89</td>
<td>1990</td>
<td>James A. Morris</td>
<td>01/00</td>
<td>2000</td>
</tr>
<tr>
<td>George Bruce</td>
<td>08/89</td>
<td>1990</td>
<td>Eric H. Jager</td>
<td>03/00</td>
<td>2000</td>
</tr>
<tr>
<td>Robert Gebhart</td>
<td>01/90</td>
<td>1990</td>
<td>Kenneth W. Johnson</td>
<td>03/00</td>
<td>2000</td>
</tr>
<tr>
<td>Ray Anderson, Jr.</td>
<td>11/90</td>
<td>1990</td>
<td>Dean C. Schaake</td>
<td>03/00</td>
<td>2000</td>
</tr>
<tr>
<td>Harold McNeil</td>
<td>03/91</td>
<td>1991</td>
<td>Fred S. Lillibridge</td>
<td>05/00</td>
<td>2000</td>
</tr>
<tr>
<td>Millard W. Smith</td>
<td>08/91</td>
<td>1991</td>
<td>Jerry A. Langrehr</td>
<td>07/00</td>
<td>2000</td>
</tr>
<tr>
<td>Clinton Engstrand</td>
<td>09/91</td>
<td>1991</td>
<td>Clark A. Roach</td>
<td>07/00</td>
<td>2000</td>
</tr>
<tr>
<td>James &amp; Kathryn Gould</td>
<td>11/91</td>
<td>1991</td>
<td>Ralph W. Ruwe</td>
<td>09/00</td>
<td>2000</td>
</tr>
<tr>
<td>E. Gail Carpenter</td>
<td>06/91</td>
<td>1993</td>
<td>Robert L. Slamal</td>
<td>02/01</td>
<td>2001</td>
</tr>
<tr>
<td>Benton Brooks</td>
<td>09/92</td>
<td>1992</td>
<td>Jerold E. Jesperson</td>
<td>06/01</td>
<td>2001</td>
</tr>
<tr>
<td>Robert C. Armstrong</td>
<td>01/93</td>
<td>1993</td>
<td>William A. Sladek</td>
<td>06/01</td>
<td>2001</td>
</tr>
<tr>
<td>Nancy Lorenz</td>
<td>02/93</td>
<td>1993</td>
<td>Harlan B. Dixon</td>
<td>06/01</td>
<td>2001</td>
</tr>
<tr>
<td>Norman R. Stewart</td>
<td>07/93</td>
<td>1993</td>
<td>Edward B. Donnelly</td>
<td>08/01</td>
<td>2001</td>
</tr>
<tr>
<td>Robert W. Watchous</td>
<td>12/93</td>
<td>1993</td>
<td>Richard P. Nixon</td>
<td>02/02</td>
<td>2002</td>
</tr>
<tr>
<td>J. George Klein</td>
<td>07/94</td>
<td>1994</td>
<td>Robert W. Frensley</td>
<td>12/01</td>
<td>2002</td>
</tr>
<tr>
<td>Harold C.J. Terhune</td>
<td>01/95</td>
<td>1995</td>
<td>Gerald W. Zorger</td>
<td>01/02</td>
<td>2002</td>
</tr>
<tr>
<td>Carl Todd</td>
<td>01/95</td>
<td>1995</td>
<td>Don L. Calvin</td>
<td>03/02</td>
<td>2002</td>
</tr>
<tr>
<td>Don R. Pate</td>
<td>03/95</td>
<td>1995</td>
<td>Claud Sheats</td>
<td>02/02</td>
<td>2002</td>
</tr>
<tr>
<td>R. James Gear</td>
<td>05/95</td>
<td>1995</td>
<td>Merle Britting</td>
<td>02/02</td>
<td>2002</td>
</tr>
<tr>
<td>Vernon Hess</td>
<td>06/95</td>
<td>1995</td>
<td>Harold Trapp</td>
<td>11/02</td>
<td>2002</td>
</tr>
<tr>
<td>E. K. Edmiston</td>
<td>06/95</td>
<td>1995</td>
<td>Donald M. Brown</td>
<td>11/02</td>
<td>2003</td>
</tr>
<tr>
<td>Jack Rine</td>
<td>07/95</td>
<td>1995</td>
<td>Elwyn Nagel</td>
<td>03/03</td>
<td>2003</td>
</tr>
<tr>
<td>Lee Cornell</td>
<td>08/95</td>
<td>1995</td>
<td>Robert Noll</td>
<td>09/03</td>
<td>2003</td>
</tr>
<tr>
<td>John Graves</td>
<td>10/95</td>
<td>1995</td>
<td>Benny Singleton</td>
<td>09/03</td>
<td>2003</td>
</tr>
<tr>
<td>Wilson Rains</td>
<td>10/95</td>
<td>1995</td>
<td>Jay Dirks</td>
<td>02/04</td>
<td>2003</td>
</tr>
<tr>
<td>Heber Beardmore, Jr.</td>
<td>09/96</td>
<td>1996</td>
<td>J. Mark Richardson</td>
<td>02/04</td>
<td>2004</td>
</tr>
<tr>
<td>Elmer “Lucky” Opfer</td>
<td>12/96</td>
<td>1996</td>
<td>John “Jack” Barwick</td>
<td>02/01</td>
<td>2004</td>
</tr>
<tr>
<td>Raymond M. Goodin</td>
<td>01/97</td>
<td>1997</td>
<td>Richard Roby</td>
<td>03/04</td>
<td>2004</td>
</tr>
<tr>
<td>Donald F. Moore</td>
<td>10/92</td>
<td>1997</td>
<td>Ruth Bell Steinberg</td>
<td>02/04</td>
<td>2004</td>
</tr>
<tr>
<td>Gerald J. Kathol</td>
<td>03/97</td>
<td>1997</td>
<td>Gordon Keen</td>
<td>03/04</td>
<td>2004</td>
</tr>
<tr>
<td>James D. Davies</td>
<td>08/88</td>
<td>1997</td>
<td>Lloyd Tarrant</td>
<td>05/04</td>
<td>2004</td>
</tr>
<tr>
<td>R. Kenneth Smith</td>
<td>04/97</td>
<td>1997</td>
<td>Robert J. “Rob” Dietterich</td>
<td>08/96</td>
<td>2004</td>
</tr>
<tr>
<td>Robert L. Dilts</td>
<td>05/97</td>
<td>1997</td>
<td>Mervyn Mace</td>
<td>12/04</td>
<td>2004</td>
</tr>
<tr>
<td>Delmer L. Powers</td>
<td>06/72</td>
<td>1997</td>
<td>Donald Hoy Smith</td>
<td>04/05</td>
<td>2005</td>
</tr>
<tr>
<td>Gene Falkowski</td>
<td>11/97</td>
<td>1997</td>
<td>Richard M. Foley</td>
<td>06/05</td>
<td>2005</td>
</tr>
<tr>
<td>Arthur (Bill) Jacques</td>
<td>01/98</td>
<td>1998</td>
<td>Wayne Brinegar</td>
<td>06/05</td>
<td>2005</td>
</tr>
<tr>
<td>Bus Woods</td>
<td>01/98</td>
<td>1998</td>
<td>Jack Heathman</td>
<td>05/06</td>
<td>2006</td>
</tr>
<tr>
<td>Frank M. Brooks</td>
<td>03/98</td>
<td>1998</td>
<td>Charles Kaiser</td>
<td>09/06</td>
<td>2006</td>
</tr>
<tr>
<td>Robert F. Walters</td>
<td>04/98</td>
<td>1998</td>
<td>Rod Sweetman</td>
<td>08/06</td>
<td>2006</td>
</tr>
<tr>
<td>Stephen Powell</td>
<td>04/98</td>
<td>1998</td>
<td>Karl Becker</td>
<td>10/06</td>
<td>2006</td>
</tr>
<tr>
<td>Deane Jirrels</td>
<td>05/98</td>
<td>1998</td>
<td>Frank Hamlin</td>
<td>2006</td>
<td></td>
</tr>
<tr>
<td>Ann E. Watchous</td>
<td>08/98</td>
<td>1998</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W.R. &quot;Bill&quot; Murfin</td>
<td>09/98</td>
<td>1998</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donald L. Hellar</td>
<td>11/98</td>
<td>1998</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joseph E. Rakaskas</td>
<td>01/99</td>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charles W. Steincamp</td>
<td>02/99</td>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert and Betty Glover</td>
<td>10/96</td>
<td>1998</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard E. Schwertfeger</td>
<td>11/98</td>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W. W. &quot;Brick&quot; Wakefield</td>
<td>03/99</td>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V. Richard Hoover</td>
<td>01/00</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
All Around You

Weatherford has always been driven by your needs.

Now, with the addition of Precision Energy Services we’re continuing to build a world of skills, services and technologies that revolve – and evolve – around you.

The result?

An expanded global network of 25,000 people, 730 service bases and 87 manufacturing facilities in 100 countries.

This increased local knowledge and service is there to support you anywhere, anytime. From midday in the Middle East to midnight in the middle of nowhere.

And with greatly strengthened capabilities in the critical evaluation skills of directional drilling and wireline logging, we can do even more to improve the profitability and productivity of your wells.

To see how our sphere of services can work for you, visit www.weatherford.com or contact either your Weatherford or former Precision Energy Services representative.

Drilling | Evaluation | Completion | Production | Intervention
# January 2007

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Library Closed</td>
<td>Happy New Year!</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **January 2007**
  
  **KGS Board Meeting**

# February 2007

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>18</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **February 2007**
  
  **KGS Tech Talk**

  **KGS Banquet**