



Volume 82 Number 2

March—April 2007

IN THIS ISSUE

Geo-Scenes

Member Profile: Bill D. Ham

2007 AAPG Mid-Continent Convention

Sinkholes in Sandstones

Page 11





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Table of Contents

Geo-Scenes:

The Great Unconformity &	
Sinkholes in Sandstones	11
by Sal Mazzullo: Technical Editor, Professor of Geology,	WSU

Features:

Honorary Member Profile:
Bill D. Ham 14
Memorial:
H. Marvin Douglas19

Departments & Columns:

President's Letter	7
From the Manager	
CD's & DVD's	20
Professional Directory	22
Advertiser's Directory	20
KGS Tech Talks	6
Kansas Geological Foundation	
Exploration Highlights	24
KGS Memorial	

ON THE COVER:

Not all sinkholes are developed in carbonate rocks. In this area, shallow subsurface dissolution of underlying Permian evaporites resulted in collapse of overlying beds, in this case, sandstone.

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 <u>salvatore.mazzullo@wichita.edu</u>, 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

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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.



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

KGS Tech Talks

March 7— Joint Meeting with the Geophysical Society of Kansas SEG Distinguished Lecturer, Dr. Leonard Snrka, Illuminating Reservoirs with Electromagnetics

March 12—Paul Simpson, "Introducing Xact Telemetry"

March 19—Bill Scanlan, Nutech, Houston

March 26—Richard Findley, "Bakken Shale Play"

April 9—Monte R. Markley

April 16—Steve Trenchard, Houston, "Geomorphology"

May 8—Tuesday—Larry Skelton

May 14—Larson & Company, "Taxation Issues in Funding Oil & Gas Exploration & IRAs—401Ks"

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,

Membership in our society is as follows: 648 society members, 237 paper library members, and 152 digital library members. This is approaching high levels reflecting the revival of our industry. Laissez les bon temps roulez...

The latest report is that the new software for the Walters Digital Library should be in beta testing next month and hopefully implemented in April. Some new features could be added that will be of definite interest to members. More on this later. The society will be represented at the national AAPG convention in Long Beach, California April 1st thru 4th with a booth staffed by Rebecca showing the new software and seeking membership in the Library.

Plans for the hosting of the Regional AAPG meeting in Wichita are progressing nicely under the committee chaired by Vice President Ernie Morrison. Those who can help with funding need to contact Debra FitzGerald. Some interesting field trips are being planned that add a lot of fun to such events.

The Kansas Geological Survey is very interested in another Geofest like the one we did last year. The Board voted to pursue this in cooperation with the Survey.

The board voted to support a house bill, HB 2429 that is a solicitation to the Legislature to replace funds that are being cut from the Federal Budget for the PTTC. The funding will go through the State and not to the federal government. The PTTC will no longer be an entity. But it has served our industry and the public well, providing training in new technologies to all persons interested in mineral extraction and the environmental parts of the earth sciences. I urge members to individually look at this bill and write your representatives to support it.

Respectfully Submitted,

Phil Knighton





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Contact: KGS Library



Aerial view of glaciers in & around Glacier Bay, Alaska

thanks to Tim Pierce

View of hanging wall glacier





Aerial view of valley glacier illustrating medial moraines formed when two smaller valley glaciers merge.



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 <u>manager@kgslibrary.com</u> 212 N. Market, Ste. 100, Wichita, KS 67202

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From The Manager

Dear Members,

I wonder if everyone is as ready for spring as I am. This has been *some* winter. This is the kind of winter that breeds good stories to tell the grandkids. Some of you well site geologists should have some good ones coming out of this winter! I hope things have warmed up in your part of the world and the bulbs are starting to bloom.

The library has remained very busy this winter and we are gearing up for that to continue into this spring and summer. Many of you remember Sherri Gruenwald who was on staff here at the library....she is coming back to work for us again and we are so pleased to have her returning. Her husband's job has brought them back to Kansas so we feel fortunate.



I had to make a decision about staying open late on Thursday nights and we just have not had enough members using the library on that late night to merit staying open. So starting March 1st, the library will no longer be open late on Thursday. If we find a need to have a late night again in the future, we will certainly be open to that possibility.

This spring we will be announcing that our new program to run the Walters Digital Library is ready to go. This new program will enhance the digital library experience tremendously. We will be showing it off at the AAPG Convention in Long Beach April 1–4. If you are at the convention, please come by our booth. We are supposed to be in Booth 1867, next to the Kansas Geological Survey. We are looking forward to being next to the Survey, that way when people get us mixed up, we can definitely point them in the right direction!

With the onset of the new digital programming, we will be feverishly adding new data to the system. I know this has been a major complaint from you digital members and I understand how frustrating it has been. I can't apologize enough but I am making this a major priority this spring and we will work until it is all in there.

We had a great Annual Banquet where we honored Thornton Anderson. For those of you who missed it this year, see page 27 & 28 for some photos. Thanks to Doug Davis for chairing this event once again, great job Doug!

Please remember that I am always open to suggestions and even complaints, although I charge for complaints!

Respectfully submitted,

Rebecca Radford Manager

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Geo-Scenes

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.



Fig. 1

The Great Unconformity

Perhaps our science's greatest unconformity is the one exposed at Siccar Point in the British Isles by virtue of the fact that it was here that James Hutton envisioned the significance of unconformities and the vastness of geologic time (a.k.a. "deep time"). Yet, there also are other great unconformities in the stratigraphic record, for example, the ones at the top of the Arbuckle and at the top of the Mississippian in the subsurface of Kansas. Below both of these unconformities are hydrocarbon reservoirs that have produced much oil and gas here and elsewhere in the mid-continent. The unconformity illustrated in Figure 1, known as "New Mexico's great unconformity", is exposed along the west face of Sandia Mountain in Albuquerque, New Mexico. The bedded rocks at the top of the peak overlying Precambrian granite are Desmoinesian (Cherokee) limestones in the Madera Formation. Poorly exposed in the slope between the limestone and granite are basal Pennsylvanian sandstones variously analogous to productive Morrowan and/or Cherokee sandstones in Kansas

Sinkhole in Sandstones

This is very difficult for a carbonate guy like me to say, but not all sinkholes are developed in carbonate



Fig. 2

rocks. Figure 2, taken along Interstate 40 just west of Santa Rosa, New Mexico, illustrates a sinkhole in Triassic sandstones. In this area, shallow subsurface dissolution of underlying Permian evaporites resulted in collapse of overlying beds, in this case, sandstone. The geologic scenario here is virtually identical to that proposed by Dr. Robert F. Walters for the sinkholes around Hutchinson, Kansas, that is, collapse of surficial beds due to dissolution and/or mining of the subsurface Permian Hutchinson Salt.

submitted by Sal Mazzullo

23rd Annual KGS Fishing Tournament



Kingman State Fishing Lake

Friday April 27, 2007

For more information—see Entry Form Insert

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Member Profile



Bill D. Ham

was born in Bucklin, Kansas on December 13, 1935 to Lowell and Ellen Ham. My parents were divorced when I was four years old and, while living with my grandparents, I began my elementary education in Satanta, Kansas. When my mother later remarried, I came to Wichita where I was enrolled in the third grade class at Kellogg Elementary. I later attended Washington Elementary, Roosevelt Intermediate and Wichita High School East, graduating in 1952.

Always interested in sports, I played basketball and baseball, playing on as many as two hardball teams and one softball team at the same time. I played pitcher and first baseman and, during the summer, my right pitching arm was so sore that I went around with a constant odor of liniment.

I was told that I had a half-sister and, about fifteen years ago, after her daughter located me on the internet, my wonderful sister, Patricia Ham Storms called me from California to make contact and introduce herself. She and her husband, Dennis, are California natives and have two grown children and grandchildren. We occasionally meet, but are in constant contact from afar and she has certainly made my family complete at last.

I enrolled at the University of Wichita in 1952, at the age of sixteen. Originally a Pre-Law major I soon changed to Pre-Med. In 1953 I moved to California where I transferred to U.C.L.A., returning to Wichita University later that year.

In the second semester of my Junior year it became apparent that funds were not going to be available for me to enter medical school, so I decided that I needed to change my major immediately in order to graduate in a field that would allow me to enter into a profession upon graduation. I also thought that to proceed in the biological sciences would not offer lucrative opportunities without advanced degrees. After much soul searching and research, I decided to explore geology. I enrolled in Geology 111, which was being taught by Mr. Andy Lang. I immediately fell in love with the science of Geology and Mr. Lang became my advisor. I decided that if I were to graduate within the next year, I needed to get busy and take as much geology as possible, so, in the summer of 1955, I went to Kansas State College for some upper division geology courses. I later returned to graduate with 36 hours of Geology from Wichita University in 1956 with a B.A. degree, Cum Laude, and with honors in Geology.

While at Wichita University, now Wichita State University, I was honored to have studied under such wonderful professors as Dr. Robert Berg, Dr. Paul Tasch, and Mr. Andy Lang, as well as being associated with and learning from Mr. Calvin Noah, for whom I served as his assistant for his Geology 111 course, and also Mr. Harold Woods. Before graduation, Dr. Berg was most insistent that I remain in school to study for a Master's degree, however, right or wrong, I felt that I needed to graduate and enter the work force.

Some of my classmates and good friends who are, or were, KGS members include such fine petroleum geologists as Don Beauchamp, Jene Darmstetter, Don Pate, Ray Dombaugh, Byron Hummon, Gordon Keen, J.C. Musgrove, Arden Ratzlaff and Glen Rupe.

Upon graduation in 1956 there were precious few

jobs to be had in the petroleum or mining industry and, if there were, who in their right mind would hire a twenty year old recent graduate with absolutely no experience, and a 1A draft classification, knowing that about the time they got him trained, he would probably be lost to the draft. A family friend, who was a Realtor, knew that I was seeking employment and mentioned that he had just sold a home to an

Probably my most challenging, and potentially embarrassing, experience I had was when Bob Miller, the ever optimistic and aggressive salesman would announce "Oh, by the way, we are meeting with a new client tomorrow to discuss planning a big program in some area (like the Williston Basin, for instance) and I told them that <u>you</u> were an expert in the area."

oilman, Lee Brooks, and suggested that I might call him in case his company might be hiring. As luck would have it, I met for an interview with Mr. Lee Brooks, John Care, Charles Wallace and Marvin Koop, the owners of a seismic exploration company, Seis Tech Exploration, Inc., in June, 1956. They called me back at my home that same afternoon and asked if I could report for work on Monday as a seismic computer. I remain truly grateful and indebted to these gentlemen for the wonderful opportunity they afforded me.

I was so excited that they would give me this break, considering that I had no experience in Geophysics, that I called my fiancée to make wedding plans. In retrospect, this sounds so foolish and out of character for me to undertake such a responsibility, however, I knew that all I needed was a chance to perform at a job and I was <u>not</u> going to lose it.

On July 13, 1956 I married my high school classmate and the love of my life, Beverly Jeanne Bukacek. She then proceeded to complete her degree in English Literature from Wichita University in 1957. We celebrated our 50th Wedding anniversary in 2006. We have two daughters, Monique Renee Schoonover, and Dawnette Jenelle Ham, as well as two granddaughters.

> I had a great relationship with Seis Tech and made Party Chief Geophysicist within the first year. I was later transferred to the Oklahoma City office for a year before returning to Wichita. Our clients were some of the finest oil operators in the state and included the likes of Birmingham-Bartlett Drilling Co. (Paul Jennings & Jack Childers), Nadel & Gussman (Elbie McNeil), Thunderbird Drilling, Inc. (Bill Owen & Todd Aikins). Lario Oil & Gas (John Brewer, et al), Walters Drilling Co. (Dr Bob

Walters & Fred James), Petroleum, Inc. & Tom Allan, to name a few. During my tenure at Seis Tech we had several KGS members join the staff, such as E.A. Opfer, Don Pate and Lloyd Tarrant.

In 1960 I was sent to Denver with Mr. Bob Miller to start up a new subsidiary seismic company, Seis Tech Geophysical, Inc. We became very active in a short period of time. I set up a field office in Rawlins, Wyoming and then Wolf Point, Montana before returning to Denver. The crew covered Nebraska, Colorado, Montana, Wyoming, North and South Dakota and Utah. While in Denver, I was fortunate to have been instrumental in the discovery of the Sleepy Hollow Field in Redwillow County, Nebraska for Pubco Petroleum Corporation. This was based upon a *(Continued on page 16)*

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(Continued from page 15)

subsurface idea of Mr. Gary Sandlin (KGS member) which really came to fruition as a major discovery and I understand it is in secondary recovery and has produced about forty million barrels of oil from the Reagan Sand and five million barrels from the Lansing/Kansas City.

Probably my most challenging, and potentially embarrassing, experience I had was when Bob Miller, the ever optimistic and aggressive salesman would announce "Oh, by the way, we are meeting with a new client tomorrow to discuss planning a big program in some area (like the Williston Basin, for instance) and I told them that you were an expert in the area." Most of the time, I had absolutely no experience, either geologically or seismically, in the area, and neither had he, so he could not offer much in the discussion. I would have to really "hit the books" to become this "expert" overnight. With so much at stake, being new contractors to the area and a limited number of potential clients, this was a most harrowing experience.

In late 1961 I left Seis Tech and moved back to Wichita to become a consultant and join the family business as a partner with my stepfather in J.H. Baugh & Co., Real Estate. Our first daughter was born in September of that year and we felt we could now settle down and establish a home here and rear our family. In 1962 my old friend and former colleague at Seis Tech, E.A. "Lucky" Opfer approached me about joining him in his newly established company, Kansas Seismic Exchange, Inc. I liked the idea of this relatively new concept of storing, brokering and reinterpreting previously shot data, so we became partners and I still maintained my consulting status. Years later we added the collecting of old core drill and surface map data to our seismic record data.

In 1968 we decided to start our own contract seismic company, over which we would have complete control of the field crew, to strive to obtain consistent, better quality, new shooting, instead of assigning the program to an outside contractor's crew. I became President of Exploration, Inc. and Lucky was Vice-President. We hired Don Parry, Archie Hunter, and Saul Kreutzer, all ex-Seis Tech employees, to fill the major crew positions, and for the next twenty-eight years we operated as seismic contractors, drilled shallow oil wells in far eastern Kansas, drilled anhydrite strat tests to depths up to 1,000 ft. and conducted core drill surveys. We enjoyed much oil finding success over the years with supportive clients such as Raymond Oil Co., Murfin Drilling Co., Graham Michaelis Drilling Co., Beardmore Drilling Co., Clinton Oil Co., and a host of other fine clients.

Lucky and I had several other business ventures, which were outside the oil industry, but, unfortunately, fortune did not smile upon us. We had an interesting and varied relationship over thirty-four years until his retirement and later untimely death in 1996. I am still the operating partner in Kansas Seismic as well as conducting my own Consulting Geophysicist business, however, I no longer have employees and I "wear all of the hats."

My professional memberships besides KGS included the Society of Professional Geophysicists, for almost thirty years, and formerly a member of the Society of Professional Earth Scientists. In past years I have served on the KGS picnic committee for ticket sales and donations. My recreational activities have always been rather limited due to working seven days per week, however, I had always been interested in Karate, so in 1975, at the age of forty, I began taking lessons and eventually earned my 1st degree black belt in June, 1977 and then taught Karate until earning my 2nd degree black belt in May 1978. I had to give up my karate due to the demands of running the businesses, however, I still enjoy the martial arts and try to watch the various matches on TV.

For about the last thirty years my wife and I have devoted most of our time to raising our family of rescued dogs, many have lived with us for fifteen years. This takes up most of our recreational time, as there are usually six or seven dogs and they are all housedogs ranging in size from a toy schnauzer to a giant German shepherd.

There have been many fellow professionals who have influenced my career but I would like to mention a few individuals who have made a profound impression upon me but do not realize it because I have never told them so. In fact, I do not believe that, in most instances, I actually realized it myself until looking back over the years and coming to the stark realization that, due to my subconscious admiration for their respective work ethics and attention to detail, I have actually tried to emulate their fine qualities. They are the following:

Paul Jennings- Paul has been my mentor ever since working closely with him from my early days at Seis Tech when he was with Birmingham-Bartlett and continuing through his days with Clinton Oil Co. and K&E Drilling Co. I always felt that when Paul was reviewing my work, I had better be correct because it seemed that he always had the "answer book." I feel that, from my experience, Paul is the most precise and methodical geophysicist whom I have attempted to emulate;

Marvin Douglass- I worked very closely with Marvin while he was with Clinton Oil & Graham-Michaelis and found him to be the most thorough research geologist I had the pleasure to work with. I often commented that with the amount of time he spent researching the tops, tests, etc., I didn't know when he found time to prospect, but he did manage to come up with many fine subsurface

ideas and we made many discoveries;

Contract in the

I believe that Dr. Robert Berg influenced my career greatly in instilling his attitude of never being satisfied with what you have accomplished, because you can always do better. What a challenge! I believe that there are many new goals to be achieved, therefore, I have no plans for retirement

thoroughness. It shows that "the apple surely does not fall far from the tree."

My only regret is that all of the above have good hands, whereas, I have never been known for my good penmanship, I guess that is the doctor influence in me.

Probably one of the most interesting characters I have encountered would be our own former KGS member, Jack Childers. Jack was a good geologist and worked hard at it, but he really "burned the candle at both ends", as they say and he really worked hard at that too. When Jack was in his older years, he once said to me "if I had known that I was going to live this long, I sure would have taken better care of myself."

> I think that being a geologist is a very respectable profession and would certainly recommend it to any young aspiring student. Further, I would advise a young geologist beginning his or her career to not be afraid to accept new challenges as they appear, however, do not accept a project if you do not intend to put forth your very best effort to complete the job to the best of your ability.

Jerry Honas– He is another fine geologist whom I feel has many of the same fine qualities as Marvin Douglass, and may be of the same stature, but I have not had nearly the years of experience working with him;

Jim Daniels- Throughout my career I have admired Jim's work ethics and attention to detail and he has made a great influence on my career and made me strive to be better.

Ted and Clarke Sandberg- Last but not least, I must say that, from my limited experience with these two men, they rank high up with the aforementioned geologists, and it is so gratifying to note that Clarke has come along with his father's same drive and I look forward to coming to the office each day and have always tried to learn at least one new thing each and every day and I would encourage others to do so also. Judging from the time I spent coming up with the facts for this biography, I would recommend that a young geologist start keeping a book wherein a list of important events are noted in a timely fashion and kept religiously so that, in forty or fifty years, if they have the need to know these dates, events, successes, failures, personal contacts, etc., they would be readily available.

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

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Saturday September 8, 2007 The Oread Group in Eastern Kansas Field Trip Leader. Wan Yang, Wichita State University Sunday September 9, 2007 Kansas Underground Salt Museum Field Trip Leader Mike Dealy

3-D Seismic Short Course

3-D For Geologists By Jim Bogardus and Bill Pramik Petroleum Geo-Service Saturday September 8, 2007

Opening Session

September 9, 2007 Speaker: State Geologist Bill Harrison

All Convention Luncheon

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Memorial

With the death of Marvin Douglas on December 7, 2006, the Society lost a long time member and the profession lost an "oil finder" who had been very active until health problems forced him to curtail his daily activities.

Marvin was literally born in the "oil patch," having entered this world in 1923 on a farm near Guthrie, Oklahoma where the workover rigs active in the West Edmund Field could be seen from the front porch of his family's home.

Initially, Marvin attended classes in Navina, Oklahoma, but in 1933, his father moved the family of eight children to Tulsa where Marvin graduated from Central High School in the class of 1941.

When Marvin was 15 years old he met Eileen Brinkman, and in 1942, when he was 19, and she was 18 they were married. To this union were born three children: Marvin Joseph, who died at 5 months, Ann, and Carol. Marvin and Eileen enjoyed life together until 1971 when she died of a long existing heart condition. Marvin later married Ramona Kay Barg and adopted her son Brian.

Marvin elected to attend Oklahoma A&M and arrived there with his tennis racquet and very little else to pursue what turned out to be his life-long love of tennis. His education at A & M was interrupted by World War II. He served in the US Navy from January 1943 until December 1945. His Navy service took him to the Naval Air Training Center in Norman, Oklahoma and after his discharge, he elected to pursue his education at the University of Oklahoma to study geology.

He received his Bachelor of Science degree in 1949. He was convinced by Dr. George Huffman to stay in school to work on a Master's degree. With the help of a Graduate Assistantship at \$90 per month he commenced work on a Master's, which he completed in 1951.

Marvin was hired by Champlin Refining Co. and his first assignment was to work in the District office in Midland, Texas. In 1953, Marvin was transferred to Enid, Oklahoma. The next transfer was to Oklahoma City in 1954 and then to Wichita in 1955 where he became District Exploration Manager in 1957. While at Champlin, Marvin worked with Virgil Tucker, Bill Wright, John Alexander and John Mullin.

In 1963, he terminated his employment with Champlin to work for Clinton Oil. There he worked with Earl Brandt and J. Paul Jennings. Also employed by Clinton during



H. Marvin Douglas

this period were Don Vaughn, Bob Hammond, Don Malone, Don, Moore, Charles Spradlin, George Olds, and Dick Davis.

Paul Jennings had left Clinton to work for K & E Drilling and in 1974 he hired Marvin to work for K & E. Marvin stayed with K & E where he worked with Wayne Brinegar until 1976 when he joined Graham Michaelis. Marvin was employed by Graham Michaelis until 1983 when he became an Independent Geologist. Among all of the companies he worked for, perhaps Marvin's one particular characteristic was that he found oil for his employer. He occupied a prominent position in the local "geological community" and will be missed.

Marvin is survived by his wife Ramona, son Brian of San Diego. daughters, Ann Henderson of Lawrence and Carol Douglas of Kansas City, Kansas also two grandchildren. The family designated a memorial with the Kansas Humane Society and a memorial has also been established with the Kansas Geological Foundation.

CD's & DVD's

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 Montseratt 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

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page

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

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Exploration Highlights

By John H. Morrison, III Independent Oil & Gas Service



1) Mississippian gas reserves have been discovered over one and one-quartermiles northwest of the multipay Aetna Gas Area field by Osage Resources, LLC, of Hutchinson, Kansas. The firm's #104 Osage, located in the NW/4 ofsection 7- T33s- R14W, Barber County, was completed in January '07 for an undisclosed potential. Warren Drilling tools were used to drill the well to a total depth of 5460 ft. The Mississippian formation produces from around 4850 ft in the area. Field area is located about twelve miles southwest of Lake City, Kansas. The new field has not been named.

2) Wichita-based Woolsey Operating Company, LLC has successfully completed the York C #1 in the SE/4 of section 7- T32s- R16W as a Mississippian gas well. The Comanche County exploratory well found new reserves at site located one and one-quarter miles east of the now abandoned Kroy Field. The one well

field was established after Spess Oil's York #1 produced 231 Mcf gas daily in 1999 in the SE/4 of section 12- T32s- R17W. Production was from a depth of 5086 to 5114 ft. The well was abandoned in 2003. Woolsey's new unnamed gas field is situated seven and one-half miles southeast of Wilmore, Kansas.

3) Independent producer Carmen Schmitt, of Great Bend, Kansas, has discovered Marmaton oil deposits at the Goertz #1. The Lane County wildcat well was drilled in the NE/4 of section 14- T17s- R30W to a rotary total depth of 4611 ft. Operator perforated the upper Marmaton and Fort Scott limestones and started producing an unknown amount of oil on pump on January 22, 2007. The unnamed pool discovery lies over one mile west of the 25 year old North Fork North oil field where the Lansing-Kansas City, Marmaton and Cherokee zones have produced over 420,000 barrels of crude. Schmitt's latest find is located about one and one-half miles southeast of the town of Healy, Kansas.

4) Great Eastern Energy & Development Corp. of Midland, Texas has discovered Lansing-Kansas City oil reserves at the Pennington #1, located in the NE/4 of section 34- T6s- R21W in Graham county. The wildcat pool opener found deposits over threequarters mile northwest of the Pruitt Field which also has produced oil from the LKC zones since 1987. Rotary total depth is 3831 feet. No other details have been released. Discovery lies seven miles northwest of Nicodemus townsite.

5) A new Arbuckle oil field has been discovered about nine miles north of the city of Sylvia in Reno County by Grand Mesa Operating Company of Wichita, Kansas. The Schweizer #1-35, spotted in the NW/4 of section 35- T22s- R10W, was put on pump in January. Completion details are not available. The 3720 feet deep wildcat well found new reserves threequarters mile northwest of the multipay Zenith-Peace Creek Field.

6) EOG Resources, Inc. of Oklahoma City, Oklahoma has discovered Mississippian oil and new pay source in the Verna Field (Morrow oil) in Stevens County. The Rector #11-1, SE/4 of section 11- T34s- R38W, started producing oil last month at site about six miles southwest of Hugoton, Kansas. Total depth is 6750 feet. Details not available.



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**

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.



Kansas Geological Foundation

Web Site: www.kgfoundation.org

212 North Market Wichita, Kansas 67202

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- promote geology and earth science

- preserve geological records
- establish memorials and endowments
- support field trips and seminars
- financial aid and grants to students

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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:

Century Club \$500 Club Millennium Club President's Club

\$ 100 to \$ 499 \$ 500 to \$ 999 \$1000 to \$5000 \$5000 and over

Kansas Geological Foundation News

Kansas Geological Foundation Awards 12 Scholarships

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

2007 Banquet Photos



Thornton Anderson receiving his Honorary Award



Past Presidents



Wichita State students who helped with checking in: From left, Jackie Venhaus, Andy Haner, Michael Lichtenwalter, standing, Marj Crane & Michel Runnion.

2007 Banquet Photos



Newest 50 Year Members: seated, Ted Sandberg & Hal Brown. Standing left to right: Bill Ham, Ron Mercer & Mike Raymond.



Chuck Brewer receiving his Presidential Plaque



Some of the crowd



Honorary Members



Ernie & Pat Morrison



Bob Cowdery & Doug Davis

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KGF Member	Date Deceased	Memorial Established	KGF Member	Date Deceased	Memorial Established
Dan Bowles	09/89	1990	Warren E. Tomlinson	01/00	2000
John Brewer	10/89	1990	James A. Morris	01/00	2000
George Bruce	08/89	1990	Eric H. Jager	03/00	2000
Robert Gebhart	01/90	1990	Kenneth W. Johnson	03/00	2000
Ray Anderson, Jr.	11/90	1990	Dean C. Schaake	03/00	2000
Harold McNeil	03/91	1990	Fred S. Lillibridge	05/00	2000
Millard W. Smith	08/91	1991	Jerry A. Langrehr	07/00	2000
Clinton Engstrand	09/91	1991	Clark A. Roach	07/00	2000
M.F. "Ted" Bear	10/91	1991	Floyd W. "Bud" Mallonee	10/00	2000
James & Kathryn Gould	11/91	1991	Ralph W. Ruuwe	09/00	2000
E. Gail Carpenter	06/91	1993	Robert L. Slamal	02/01	2000
Benton Brooks	09/92	1992	Jerold E. Jesperson	06/01	2001
Robert C. Armstrong	01/93	1993	William A. Sladek	06/01	2001
Nancy Lorenz	02/93	1993	Harlan B. Dixon	06/01	2001
Norman R. Stewart	07/93	1993	Edward B. Donnelly	08/01	2001
Robert W. Watchous	12/93	1993	Richard P. Nixon	02/02	2002
J. George Klein	07/94	1994	Robert W. Frensley	12/01	2002
Harold C.J. Terhune	01/95	1995	Gerald W. Zorger	01/02	2002
Carl Todd	01/95	1995	Don L. Calvin	03/02	2002
Don R. Pate	03/95	1995	Claud Sheats	02/02	2002
R. James Gear	05/95	1995	Merle Britting		2002
Vernon Hess	06/95	1995	Harold Trapp	11/02	2002
E. K. Edmiston	06/95	1995	Donald M. Brown	11/02	2003
Jack Rine	07/95	1995	Elwyn Nagel	03/03	2003
Lee Cornell	08/95	1995	Robert Noll	09/03	2003
John Graves	10/95	1995	Benny Singleton	09/03	2003
Wilson Rains	10/95	1995	Jay Dirks		2003
Heber Beardmore, Jr.	09/96	1996	J. Mark Richardson	02/04	2004
Elmer "Lucky" Opfer	12/96	1996	John "Jack" Barwick	02/01	2004
Raymond M. Goodin	01/97	1997	Richard Roby	03/04	2004
Donald F. Moore	10/92	1997	Ruth Bell Steinberg		2004
Gerald J. Kathol	03/97	1997	Gordon Keen	03/04	2004
James D. Davies	08/88	1997	Lloyd Tarrant	05/04	2004
R. Kenneth Smith	04/97	1997	Robert J. "Rob" Dietterich	08/96	2004
Robert L. Dilts	05/97	1997	Mervyn Mace	12/04	2004
Delmer L. Powers	06/72	1997	Donald Hoy Smith	04/05	2005
Gene Falkowski	11/97	1997	Richard M. Foley	06/05	2005
Arthur (Bill) Jacques	01/98	1998	Wayne Brinegar	06/05	2005
Bus Woods	01/98	1998	Jack Heathman	05/06	2006
Frank M. Brooks	03/98	1998	Charles Kaiser	09/06	2006
Robert F. Walters	04/98	1998	Rod Sweetman	08/06	2006
Stephen Powell	04/98	1998	Karl Becker Frank Hamlin	10/06	2006
Deane Jirrels	05/98 07/98	1998		10/06	2006
William G. Iversen		1998	Marvin Douglas	12/06	2006
Ann E. Watchous W.R. "Bill" Murfin	08/98 09/98	1998 1998			
Donald L. Hellar	11/98	1998			
Joseph E. Rakaskas	01/99	1998			
Charles W. Steincamp	02/99	1999			
Robert and Betty Glover	10/96	1999			
Howard E. Schwerdtfeger	11/98	1998			
W. W. "Brick" Wakefield	03/99	1999			
V. Richard Hoover	01/00	2000			
, . Iticilui u 1100 voi	01/00	2000			





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March 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7 Joint Meeting KGS—Geophysical Tech Talk	8	9	10
11	12 Tech Talk	13 KGS Board	14	15	16	17
18	19 Tech Talk	20	21	22	23	24
25	26 Tech Talk	27	28	29	30	31

April 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
	—AAPG Convent	ion Long Beach —				
8	9 Tech Talk	10 KGS Board	11	12	13	14
15	16 Tech Talk	17	18	19	20	21
22	23 Tech Talk (TBA)	24	25	26	27 KGS Fishing Tournament	28
29	30					