

KANSAS GEOLOGICAL SOCIETY BULLEFTON

Volume 84 Number 6

November—December 2009

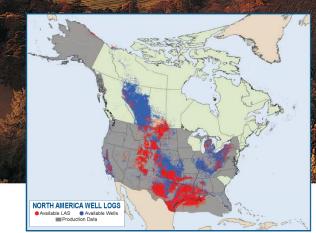
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IN THIS ISSUE

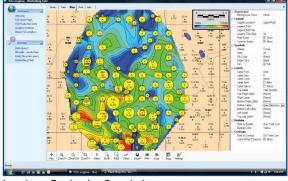
MEET THE CANDIDATES KGS 2010 Board Elections Page 14

Geo Scenes: Page 10

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Table of Contents

Features:

Geo Scenes	10
Meet The Candidates	14
Book Review by Dan Merriam	20

Departments & Columns:

4
7
9
17
19
22
24
26

ON THE COVER:

A reminder to vote for Kansas Geological Society Board candidates of your choice. Ballots are due back to the KGS library on or before December 1st. Candidates are featured on page 14 of this issue

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

SOCIETY Technical Meetings

Fall 2009

Oct. 27— Norman Hyne—"The Glenn Pool Oil Field & the Start of the Oklahoma Oil Boom"

Nov. 3— Sal Mazzullo, etal—"Mississippian Outcrop-to-Subsurface correlations & Depositional Systems: Implications for Reservoir Prospecting"

Nov. 17 William Morris— "Architectural Historic Preservation—Uncovering Layers"

Nov. 24—Matt Brueseke, Kansas State - "Mid-Miocene Magmatism and Mineralization in the Northern Great Basin & Oregon Plateau"

Dec. 1—Brian Cardott, "History of CBM in Oklahoma"

Dec. 2 & 3—Petroleum Geology of Kansas: A two day workshop by PTTC & Kansas Geological Society at Airport Hilton—Wichita (see insert)

Dec. 15— Paul Ramondetta—"Karsting in the Arbuckle of El Dorado, Comparisons" (following the talk, the KGS & KGF will conduct the annual business meetings)

Dec. 22—Dr. Stephen Hasiotis, KU— "Continental Trace Fossils and Their Implications to Interpreting Depositional Environments and Significant Surfaces: Ichnology for the 21st Century"

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.



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KANSAS GEOLOGICAL SOCIETY



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A.A.P.G. DELEGATES

Ernie Morrison Robert Cowdery 2010

Alan DeGood 2010

2009

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Congratulations to Randy Lilak For correctly guessing the Oct.-Nov. trilobite as

Radiaspis (Lichida: Odonotopleuridae)

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

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President's Letter

Greetings KGS Members,

This is my final opportunity to write a President's letter. It has been a pleasure and honor to serve you this year and I look forward to continuing on the board as director and working with President-Elect Rick Saenger. I wish I could report on better fiscal health of the Society and its business. While not dire, it could be better. We as a country, an industry, and a society have had a difficult year financially. As I have previously reported, the KGS Board has been closely monitoring sales and costs through the year, but now have formed a Finance Committee consisting of Board Members Beth Isern, David Clothier, Steve Frankamp, Bob O'Dell, and the yet to be determined incoming Secretary-Treasurer for 2010. The committee will meet weekly for the immediate future to determine options to raise revenue and cut expenses, supporting efforts by Rebecca Radford our Business Manager to trim costs while maintaining services. We have had to draw twice from our "rainy day" fund in the second half of the year to meet monthly expenses. While the fund is there for this purpose, the fix is temporary. The economy, while showing signs of improvement, has affected business, perhaps in a fundamental way and we are taking steps to reexamine our business model and define how to best serve the membership. On the upside, I think we are in for changes, very good ones, in fact, so please read on.



I have learned a lot over this past year and have a much better understanding how members use services provided by the Society, namely the paper library and Walter's Digital Library (WDL). While

members use many vendors for data, the library is a place to go for the rest of the information, without exception. The Society has unique data on wells due to its own efforts to gather this information over many years and I acknowledge this legacy of hard work to this end by many volunteers and paid staff alike. The result is one of the best libraries in the country and the current Society's office staff and volunteers deserve our gratitude for keeping the records in good shape and carefully handling your visits, calls, and emails so you get the information you need.

Whether you work with paper or electronic records on your desktop, having rapid access to usable electronic data delivered in a friendly efficient manner is now the new norm rather than the exception. As mentioned in previous letters this year, the Society is well down the path in developing a new WDL that we are certain will meet this new norm and make it attractive for those to rejoin the WDL and obtain new members. This new effort started under Ernie Morrison's Presidency last year is a bottoms up rewrite of code and resampling images to quickly query the library holdings, view, and obtain documents. The electronic and paper holdings are relayed to the user and new data submitted through the state will flow automatically to the library when the information is made public. The advantage to the State of Kansas, including me as an employee of the Geological Survey, is that all the data will be accessible and users will have the most complete information as is possible. More comprehensive data access will encourage business and support drilling with the next wave of technology, maybe involving CO₂?

The Society has committed to the long haul to revamp the WDL and make it a cornerstone of the library function and income stream. I extend my thanks to all those who have worked on prior versions of the WDL from Tyler Sanders' brainchild in the early 1990's to the efforts of the Kansas Geological Foundation including nearly a million dollars raised to scan the data. Wow! Yes, some adversity along the way for all kinds of reasons, but good things don't happen easily. For those entrepreneurs, you might ask how can we significantly increase sales of paper and electronic logs? Options are being discussed by WDL Committee such as increasing the visibility and access to the data in a manner resembling successful shopping vendors and browsers on the web. This type of thinking is change waiting to happen. The recent Energy Library Conference held in Tulsa before the Mid-Continent AAPG meeting led to a request that AAPG provide links to energy libraries including ours. Right on.

Many outside of the current Society membership don't know about the Library or the WDL or have old misconceptions. The WDL Committee recently endorsed the idea of having a live search tool to list well data types at the Society home page to encourage and facilitate phone or email orders or even better, to join the WDL at competitive rates. The unanimous opinion of the WDL committee members is that sales of electronic log data will only increase when we realize speed and accessibility dictated by user preferences. Now is your time to speak up. A new version of the WDL will go live momentarily. I know this sounds all too familiar. Well, it is for us to prove to the members. We welcome you to become part of this user community!

Thank you for supporting the social activities and the well attended field trip. My thanks to the organizers. Our recent event was the sporting clays. Great turnout with 67 members and lots of fun. But, now I know a lot more about this sport and much to my chagrin, Larry Richardson posted the scores in the library and Rebecca has the photos. I hope to do better next year.

The Research Committee with Dan Merriam is working hard on a new Oil and Gas Volume and a group of us continue to work on the Bob Slamal Digital Type Logs. I'll have more time to devote to it in January.

The near weekly technical presentations this spring and now this fall are a highlight of the Society. Your attendance has been outstanding. It was great to have the petroleum geology classes from KU, WSU, and OSU present their field studies. Our Continuing Education Chairman Bob Cowdery has been asked by Rick Saenger to serve another term in 2010 and Bob has accepted so we in store for another great year of presentations!

I can not sign off without thanking my Board for good serious discussions, mixed with good camaraderie. It has been fun, seriously, and your dedication to the Society is most appreciated. Thanks to all of you for serving this year. Thanks to Rebecca and staff for your efforts on behalf of the membership. And most of all thanks to you for supporting the Society.

Respectfully submitted. Lynn Watney



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Dear Members,

I can't believe that it is time for Society elections again. We have another great slate of candidates this year. You can learn about them starting on page 14. Look for your ballots to be in the mail soon and remember to get them back to us by December 1st.

We are nearing completion of the new software for the Walters Digital Library. We have several people beta testing and we certainly appreciate their time and effort towards this project.



We also have been processing a lot of new logs from the KCC and if you want to know what we have, remember that we have a link to a spreadsheet list of all logs received on our website: www.kgslibrary.com. If you think something should have been released, please check this list first. The list is arranged by API but can be sorted anyway you need. So if you are looking for a certain well name or operator, you can sort or do a search for that particular item. The link is on the Home Page of the website and simply says "KCC Spreadsheet."

We had a very successful Shooting Tournament in October, thanks to Larry Richardson, Rick Saenger, Kent Crisler & Phil Hesse. I think we had the biggest turnout yet! It was a little windy at some of the stations but we had some really good shooters and of course, lots of fun, prizes (everyone got something), and wonderful food. Thanks again guys, for putting on such a good event.

As the year winds down, we are seeing the price of oil go back up. This is welcome news as it has been very slow in the library this year. I would like to stress to all of you who are members, that this library is supported totally by you and your usage of our data. I keep hearing from several that they are going elsewhere for their data and I know you can find it for less sometimes, somewhere else but we need your support and your business. It is what keeps this library open and please remember, it is here for you, it is YOURS!

I attended the 5th annual Energy Library Conference in Tulsa this past month, meeting with 13 other energy libraries, their staff or board representatives. This is a very useful conference where we share ideas, problems, facility issues, etc. All energy libraries need the support of the energy community so please support your local library.

We also had a booth at the AAPG Mid-Continent convention in Tulsa, OK. We had lots of traffic at the booth and I heard from many how good the talks were. Lots of information, lots of contacts and thank you to all the Wichita folks who stopped in at the booth.

Here's hoping everyone has a wonderful holiday season, stays healthy and stays busy with drilling!

Respectfully submitted,

Rebecca Radford

Manager

GEO SCENES

Ogalalla Formation



The Ogallala Formation (Figure 1) is the most areally widespread, unconfined fresh-water aquifer in the United States. It comprises a maximum thickness of several hundred feet of weakly consolidated sandstones and conglomerates, with some shales and ash-fall deposits, that were deposited on the western High Plains during the Miocene and Pliocene as a result of continued erosion of the Rocky Mountains. The Ogallala has supplied most of the fresh water used for irrigation by farmers in western Kansas and adjoining states since the late 1800s. The heavy demand for water from the Ogallala has resulted in severe depletion of the aquifer such that most experts believe that the water resource will be exhausted within the next 20 years or so. Sometime in the distant future the erosional remnants of the very porous Ogallala siliciclastics may be a petroleum reservoir pursued by our descendants.

Mammoth Graveyard

The Hot Springs Mammoth Site is a privately-funded research site within the town of Hot Springs in southwestern South Dakota. The site dates from about 26,000 years ago, and it is replete with some of the best-preserved mammoth fossils in North America (Figure 2). The fossils include both wooly mammoths and the much larger Columbian mammoths. During the late Pleistocene the site was a sinkhole partially filled with fine-grained sediments, and with water derived from below from hot springs. Mammoths were able to get into the small pond, but could not get out because of the relatively steep and slick walls of the sink. The site was discovered in the 1990s when ground was being bulldozed for a housing development.

Mississippian Madison Limestone

The Madison Limestone is a thick section of shallow-water limestones and dolomitic limestones (Figure 3) deposited during Mississippian time. The rocks are correlative to the Kinderhookian and Osagean rocks in subsurface Kansas. In outcrops the rocks are very porous, and in some areas they are the host for many caves and caverns. The Madison also comprises major subsurface oil reservoirs in the Williston Basin and some adjoining areas, where production is from structural and combination structural-stratigraphic traps. Porosity in the Madison Limestone occurs at various scales, including caves and caverns, vugs, and biomoldic pores (Figure 3).

contributed by Sal Mazzullo



Figure 1—Outcrop of the sandstones and conglomerates of the Ogallala Formation near Lake McConaughey in western Nebraska

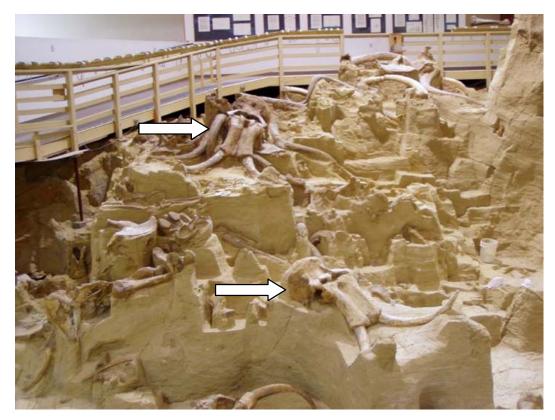


Figure 2. – Hot Springs Mammoth Site with well-preserved mammoth fossils. The arrows point to two complete Columbian mammoth skulls with tusks.



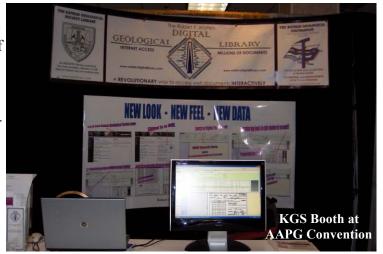
Figure 3. – View of the cliff-forming, Mississippian Madison Limestone in Spearfish Canyon in the Black Hills of South Dakota. The inset shows biomoldic porosity in a sample of dolomitic limestone in the Madison.

Mid-Continent Section Meeting of the AAPG a Rousing Success

The recent meeting of the Mid-Continent Section in Tulsa was outstanding. From an attendance standpoint, the committee had planned on an attendance of 400 whereas the actual attendance was 920.

Rebecca Radford, Manager of the KGS, reports that there was a good traffic flow to the Kansas Geological Society booth, which she maintained throughout the meeting. She was helped in setting-up and tearing down by the current President, Dr. Lynn Watney and Ernie Morrison.

KGS members participating as chairs of oral sessions included: Dr. Susan Nissen, Dr. Dave Newell, Dr. Lynn Watney, Ernie Morrison, and Marty Dubois. Presentations at these sessions that were made



by KGS members included: Dennis Hedke, Dr. Dave Newell, Dr. Lynn Watney, Ray Sorenson and Marty Dubois. Presentations at the Poster Sessions were made by Dr. Sal Mazzullo, Wayne Woolsey and Brian Wilhite.

KGS members who attended this very excellent meeting included: Alan Banta, Bryce Bidleman, Beth Isern, Wayne Woolsey, Brian Wilhite, Dr. Sal Mazzullo, Jerry Honas, Dave Clothier, Corey Baker, Alan DeGood, Larry Richardson, Ernie Morrison, Dr. Lynn Watney, Wes Hansen, Tyler Sanders, Dr. Susan Nissen, Dr. Dave Newell. Dr. John Doveton, Marty Dubois, Dr. Dan Merriam, Dennis Hedke, William K. Clark and Ray Sorenson.

This meeting was attended by current AAPG President, John Lorenz of New Mexico and President David Rensink, of Houston who will make a presentation to the KGS on March 16, 2010. At the All Convention Luncheon the speaker was Dr. Scott Tinker, Director of the Texas Bureau of Economic Geology who made his usual great presentation. He has agreed to make a presentation to the KGS in the Spring of 2010.

Holiday Schedule for KGS Library Closed Thanksgiving, November 26th & 27th Closed for Christmas, December 24th & 25th Closed January 1st—Happy New Year! Kansas Geological Society Annual Business Meeting

Kansas Geological Foundation Annual Business Meeting

December 15th—following the Technical Talk





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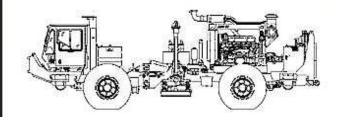
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MEET THE CANDIDATES

Vice President 2010 / President Elect 2011



Douglas V. Davis

Education:

B.A. Geology, Wichita State University, 1973; Post Graduate Studies, WSU, 35 hours 1973-1976; Teaching Certificate Secondary Education, 1987, Wichita State University

Professional Experience:

Geologist for Robert J. Gutru, 1974-1976; Vice-President High Plains Consulting, Inc., 1976-1978; President, Clark -Davis, Inc. 1978-1986; Consulting Geologist, 1986-1990; Consulting Geologist, Charter Production Co., 1990-1994; Consulting Geologist, 1994-1997; Right-of-Way Consultant, Koch Industries, Inc. 1998-2000; Consulting Geologist, American Energies Corp., 1997-Present

Professional Affiliations:

Kansas Geological Society; AAPG; Licensed Geologist #472 State of Kansas

KGS Board and Committees:

KGS Board Secretary 2006, Treasurer 2007 Library Committee; Field Trip Committee; Chairman Annual Banquet; Assisted AAPG Mid-Continent Convention 1999, Social Activities Chair AAPG Mid-Continent Convention 2007



Kent Scribner

Education: Kansas State University---B.S. in Geology

Professional Experience:

Slawson Exploration Company, Inc.---1983-1996 Stelbar Oil Corporation, Inc.---1996-present

Professional Affiliations:

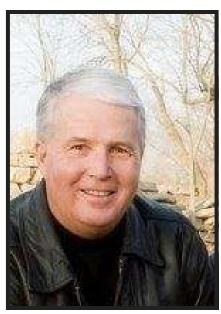
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KGS Board and Committees:

Secretary Treasurer Advertising Chairman Picnic Chairman Nomenclature Committee member

MEET THE CANDIDATES

Secretary 2010 / Treasurer 2011



David Callewaert

Education:

BBA, Accounting, 1977, Wichita State University M.S. Geology, 1987, Wichita State University

Professional Experience:

Geologist—Rains & Williamson Oil Co., 1980-1989 Geologist / Owner, Eagle Creek Corporation, 1989present.

Professional Affiliations:

Kansas Geological Society Licensed Kansas Geologist #232 AAPG

KGS Board and Committees:

Picnic Committee Golf Committee



Marjorie Crane Noel

Education:

B.S., Geology, Wichita State University, 2002 M.S., Earth, Environmental & Physical Sciences, Wichita State University, 2007

Professional Experience:

Geologist—Woosley Operating Co., 2007-present Lecturer—Dept. of Geology, WSU 2008-present Geotechnician—Woolsey Operating Co., 2002-2007 Library Assistant—Kansas Geological Society & Library, 2002-2004 Geotechnician—Palomino Petroleum, 2001-2002

Professional Affiliations:

Kansas Geological Society, AAPG, WSU Geo-Advisory Board 2008-present

KGS Board and Committees:

Banquet Chairperson 2004 Picnic Committee 2004-2009 Picnic Chair 2008 & 2009 Walters Digital Library Committee 2009

MEET THE CANDIDATES

Director at Large 2010 / 2011



Ken Dean

Education:

B.S. Geology, 1980, Wichita State University

Professional Experience:

Murfin Drilling Company, Inc., 2002-present; Kansas Geological Survey 2000-2003; Mccoy Petroleum, 1993-1998; Independent Geologist 1991-1993; Petroleum, Inc. 1981-1990; Aladdin Petroleum, 1980-1981; D. R. Lauck Petroleum, 1979-1980.

Professional Affiliations:

Kansas Geological Society; Kansas Geological Foundation; AAPG; Kansas Licensed Geologist #332.

Kansas Geological Foundation: Board 2005-07, President 2007.

KGS Board and Committees:

Calling Committee, Employment committee



Mikeal Maune

Education:

B.S. Geology, Kansas State University, 1975

Professional Experience:

Independent Geologist 1986-Present; Consultant, Osborne Heirs Company, 1981-1986; Geologist, Woolsey Petroleum Corporation, 1978-1981; Geologist, Woolsey-Brown Company, 1975-1978.

Professional Affiliations:

Kansas Geological Society Kansas Geological Foundation AAPG-DPA Certified Professional Geologist #5331 Licensed Kansas Geologist #210

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page

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Duke Drilling	18
GeoCare Services AAPG	13
Kansas Geological Foundation	24
Kansas State University	17
Lockhart Geophysical	18
LogSleuth-MJ Systems	25
MBC Well logging	18
Murfin Drilling Company, Inc	18
Oneota Resources	22
PARAGON Geophysical Services, Inc	13
Professional Directory	19
Sunrise Oilfield Supply	18
TGS-NOPEC Geophysical Company	2
Trilobite Testing	6
Tucker Wireline Services	13
Walters Digital Library	8
Weatherford	27
Well Enhancement Services, LLC	8

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Book Review

Kansas Physiographic Regions - Bird's-eye Views, Kansas Geological Survey, Educational Series 17, 76 p. 2009

By James S. Aber and Susan W. Aber Emporia State University, Emporia, Kansas

You've probably seen the Earth from views of airphotos, satellite images, the window of an airplane, or pictures taken by NASAs Shuttle's crew, but probably not low-altitude photographs taken from a kite or a small helium blimp. Well, here is a chance to see Kansas from an altitude of 100 to 500 feet. The authors have developed this low-altitude, high-resolution photography to a perfection. What a difference a few hundred feet make in looking at the State from a different angle and as noted by the authors (p. 3) the '...seemingly simplicity of the Great Plains contains rich and diverse environments.

The Abers - the husband and wife geology team - look at Kansas from this different perspective in a series of spectacular photographs from a dozen physiographic regions in Kansas. You'll see geology from the Tertiary Ogallala clastics on the High Plains in the west to Mississippian carbonates in the Cherokee Lowlands in the southeast and the Glaciated Region in the northeast; to cultural features such as the Chase County Courthouse of Permian Cottonwood Limestone in the Flint Hills to the German town of Liebenthal in the Smoky Hills with St.

Joseph's church built of Cretaceous Fencepost Limestone.

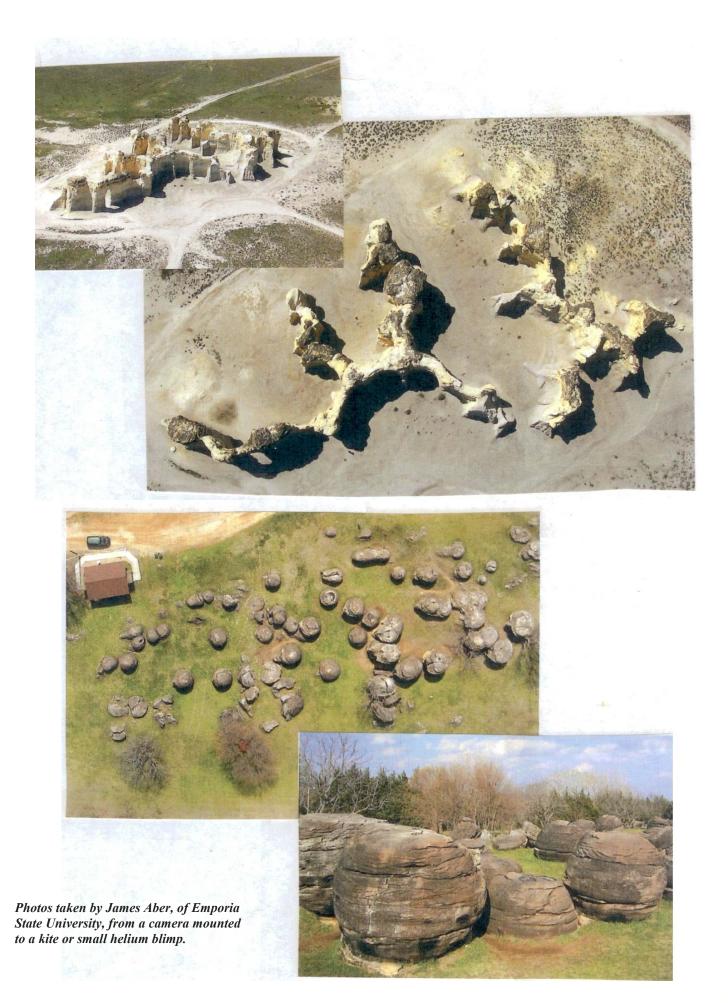
The little book is a good introduction to the geology of Kansas for the nonspecialist and the State's geomorphic attributes are outlined in detail. Scenic attractions, formed by wind and water, are featured and their origin discussed in nontechnical terms. Attractions such as Cheyenne Bottoms with the Quivera wetlands in Barton County, the solution-formed features Big Basin and Little Basin in Clark County, and stabilized sand dunes in Scott County are a few of the geologic features pictured.

Perhaps the most interesting photos are the eye-opening, bird's eye vertical views of Monument Rocks in Gove County and Rock City in Ottawa County (both reproduced here). Monument Rocks, formed of Cretaceous Niobrara chalk, and Rock City, concretions weathered out of the Cretaceous Dakota sandstone, are often featured in Kansas promotional material. The vertical photos give a new and different perspective to these natural features.

Man-made changes to the landscape also are given space. The chat piles from the lead and zinc mining in southeastern Kansas are shown as is Big Brutus, the enormous mining shovel on display near West Mineral in Cherokee County. A controlled burn in the Flint Hills to maintain the prairie grassland conditions is shown as well as several water-control structures. There are also a few pictures of old mining areas and oil fields.

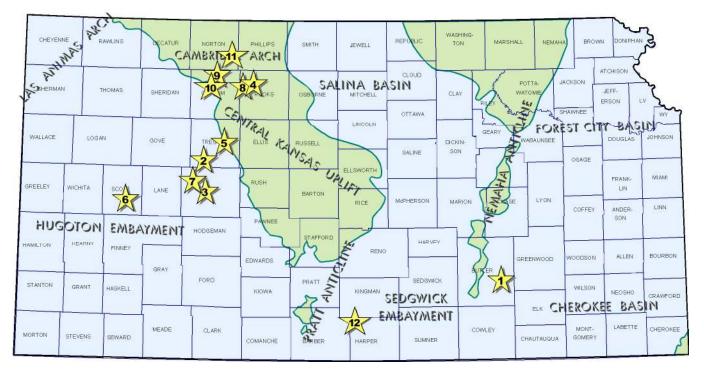
All-in-all this little book is a must not only for Kansas geologists and Kansans, but anyone interested in viewing the Earth from above. It is recommended that for those not familiar with Kansas, the book pictures be viewed with a state map for location and orientation of the photographs. It is interesting, instructive, and informative and for the price (\$12 plus shipping and tax), highly recommended as a real bargain in today's economy.

Dan Merriam



Exploration Highlights

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



(1) Metro Energy Group has successfully revived Cherokee oil and gas production in the previously abandoned Keighley West field in Butler county. The No.1-20 Ayers was drilled as an easterly stepout of the field at location in the SE/4 of section 20-T27s- R7E, about five miles east of Leon, Kansas. Operator completed the well for 20 barrels of oil, 30 barrels of water and 5 Mcf gas per day from perforations in the Bartlesville Sand member from 2688 to 2698 ft. Total depth is 3260 ft.

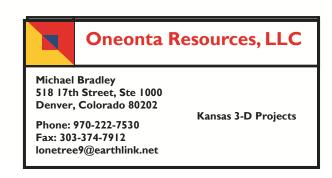
(2) S & W Oil & Gas, LLC. is producing 130 barrels of oil per day at their No. 1 Luetters 24-CD, spotted in the SW/4 of section 24-T15s-R24W, Trego county. The wildcat well opens the new Kinderknecht South field where Mississippian oil deposits have been discovered at an undisclosed depth. Rotary total depth is 4350 ft. Field area lies about six and one-half miles northwest of Ransom, Kansas.

(3) **Robert F. Hembree**, independent producer, has completed the Parker No. 3, NW/4 of section 25- T18s- R24W, Ness county, for 100 barrels of oil per day, no water. The well further develops the Ness City North field, located less than one mile west of Ness City, Kansas. Production comes from lightly acidized open hole in the Mississippian formation at 4255 to 4262 ft.

(4) Bach Oil Production has regulated pump downward to produce 120 barrels of oil per day at the Lowry No. 2, NE/4 of section 34- T7s- R20W, Rooks county. The Cocinera East development well is producing commingled crude from the

Lansing-Kansas City 'C' and 'J' zones, as well as, from the Arbuckle formation. First production began on September 14, 2009. Well site lies twelve and one-half miles northeast of Palco, Kansas.

(5) Downing-Nelson Oil Company has stepped-out north of production in their recently established Pearson field in Trego county, and have discovered new pay source in the Conglomerate. In August 2006, The firm's 1-25 Mary Pearson was completed for 50 barrels of oil per day from perforated depths in the Lansing- Kansas City and Cherokee Sand zones. Now, the No. 1-23 RS, drilled in the SE/4 of section 23- T13s-R22W, has been completed for 38 barrels of oil and 10 barrels per day with pay from perfs in the LKC from 3689 to 3775 ft overall and Conglomerate from 4016 to 4020 ft. Discovery Drilling tools bottomed the well at 4150 ft.



(6) Palomino Petroleum, Inc. has recovered good shows of oil and gas multiple zones at the No. 1 Kirk in Scott county. Located in the SW/4 of section 24- T19s- R32W, the wildcat well has tested 2285 ft. of total fluid with good cuts of gas and oil during a Drill Stem Test covering Lansing-Kansas City zones from 4270 to 4384 ft. In addition, another DST taken over the Marmaton (Fort Scott) and Cherokee (Johnson Zone) from 4489 to 4654 ft. had 525 ft. of gas in pipe and recovered 230 ft. of gassy oil cut mud. Five and one-half inch casing has been set thirteen feet off bottom at 4843 ft. The well awaits completion. Well lies nearly two miles from the Rodeo Road field, or eight miles southeast of Scott City, Kansas.

(7) Palomino Petroleum, Inc. has completed its No. 1 Patricia new pool discovery of the Pat field for 53 barrels of oil and 6 barrels of water per day. The Ness County well, spotted in the NW/4 of section 28- T17s- R25W, is producing crude from Mississippian perforations from 4426 to 4430 ft. Total depth is 4575 ft. The new oil field is situated about six and on half miles southwest of Arnold, Kansas. First production commenced on June 25, 2009.

(8) Reilly Oil Company has discovered Arbuckle oil deposits in Rooks County at the No. 1-29 Berland - a 3600 ft deep wildcat test drilled nearly three-quarters mile southwest of the Cocinera North (Lansing-Kansas City and Arbuckle oil) field. The new discovery well is producing over 20 barrels of oil per day from undisclosed depth at site located in the NE/4 of section 29- T7s- R20W, about eleven and one-half miles north of Palco, Kansas. The new oil field has been named Cocinera Northwest.

(9) H & C Oil Operations has reported the discovery of two new Lansing-Kansas City oil discoveries in Graham county. First, the No. 28-1 Tien, spotted in the SW/4 of section 28- T6s- R23W, is on pump making an undisclosed amount of crude effective August 7, 2009. The wildcat well found oil deposits over one and one half miles northeast of production in the White (LKC oil) field, about nine miles northwest of Hill City, Kansas. American Eagle Drilling tools bottomed the well at a total depth of 3963 ft. The new field has not been named.

(10) Next, in the NW/4 of section 4- T7s- R23W, the No. 4-1 Worcester is producing an unknown volume of oil as of September 2, 2009. The unnamed pool opener was drilled to a total depth of 3984 ft. Discovery site is located three-quarter mile east of the White field, or about eight miles northwest of Hill City, Kansas.

(11) Baird Oil Company, LLC has stepped-out from production in the Big Dutchman East field in Norton county to find isolated

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pocket of Lansing-Kansas City oil deposits. The No. 3-14 Adee, located in the NE/4 of section 14- T4s- R21W, is producing an unknown amount of oil since July 10, 2009. The infield wildcat well was drilled to a total depth of 3628 ft. by WW Drilling. Field area lies six and one-half miles northeast of Densmore, Kansas.

(12) Pioneer Exploration, LLC is flowing 200 Mcf gas, 4 barrels of oil and 5 barrels of water per day at their No. 1 Dirks in Harper county. Located in the NW/4 of section 33- T31s-R9W, the Sharon North field southeasterly stepout well is producing pay from the Mississippian formation from 4438 to 4450 ft. Rotary total depth is 4600 ft. Field area is situated about five and one-half miles northwest of Attica, Kansas.



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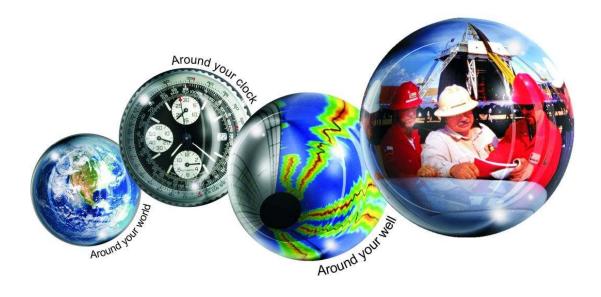
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	November 2009							
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1	Set it back!	2	3 Tech Talk	4	5	6	7	
8		9	10 KGS Board	11	12	13	14	
13	5	16	17 Tech Talk	18	19	20	21	
22	2	23	24 Tech Talk	25	26 Thanksgiving	27 Library Closed	28	
29	9	30						

December 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 Tech Talk KGS Ballots	2	3	4	5
		due	Short Course	e: PTTC & KGS		
6	7	8 KGS Board	9	10	11	12
13	14	15 Tech Talk Annual Bus. Mtg.	16	17	18	19
20	21	22 5 1 5 11	23	24	25	26
		Tech Talk		Library Closed	-Merry Christ	tmas !
27	28	29	30	31	1 library closed	