

KANSAS GEOLOGICAL **SOCIETY** ULLET

Volume 88 Number 2

March - April 2013

Established 1925



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Profile: Anthony Walton

A DIFFERENT VIEW OF GEOLOGIC TIME

> Lawrence H. Skelton Page 15





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ON THE COVER:

Thanking those that have served the Society. From the top; Kent Scribner, outgoing President, Dr. John Gries receiving Teacher of the Year Award from Debra FitzGerald, Honorary Members and Past Presidents. See more banquet photos throughout Bulletin.

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 Rebecca Radford, <u>manager@kgslibrary.com</u> or mailed to 212 N. Market, Ste. 100, Wichita, KS 67202. 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 <u>http://www.kgslibrary.com</u>

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SOCIETY Technical Meetings

- Mar. 5— Kurt Rottman, "TBA"
- Mar. 19— Andrew Wray, Schlumberger, "TBA"
- Mar. 26-Dr. Hendratta Ali's Fort Hays Class
- Apr. 1- Dr. Jim Puckette class from Oklahoma State University
- Apr. 15-Kurt Rottman, "TBA"
- Apr. 22-Brian Cardott, Oklahoma Survey, "TBA"
- May 7-Charles Wickstrom, "TBA"
- May 28—Larry Richardson's WSU class

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



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

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President's Letter

Dear KGS Members,

The year is well under way, and we've already accomplished a lot as a Society. Bob Bayer and his committee did an excellent job on the Annual Banquet, where we inducted Lynn Watney as an Honorary Member of our Society. The attendance was good, and everyone enjoyed the fellowship and excellent food provided by the newly re-decorated Wichita Petroleum Club.

Our busy schedule of Technical Meetings is well underway, thanks to the tireless efforts of Bob Cowdery. We've had a number of interesting talks, and attendance has been strong at all meetings. We did have



enough snow to postpone a meeting, but will re-schedule the speaker for later in the spring.

I'm making plans to attend the AAPG Annual Convention in Pittsburg in May. I hope that I will see some of you there. It looks to be an interesting convention, with a lot of presentations dealing with resource plays. Doug Davis, who is chairman of the our Society's Mid-Continent AAPG Section Meeting this fall, plans to attend. I'm sure he'll bring back a lot of great ideas, and incorporate them into our section meeting.

At the last KGS Board meeting, the Board passed a motion to form a committee to review our options regarding the KGS Library lease. As I'd reported to you in my first letter as your President, our current lease expires at the end of 2013. Chuck Brewer has agreed to chair this committee. He and his committee will look at the possibility of moving the Library into a new space, as well as negotiating improvements on an extension of our current lease. We are in a very good financial position, and may have the opportunity to purchase rather than lease space. I made an announcement regarding this potential change at the last technical meeting, and would invite the input of the membership regarding our options. Where would you like the Library to be located? What improvements would you like to see?

On a final note, the call for papers for the Mid-Continent AAPG Section Meeting has gone out, with a deadline of March 15th for Abstracts. I would encourage any of you who have something to offer to get your Abstract in.

Until the next bulletin, I hope the weather doesn't interfere too much with all of your operations, and that you're busy finding lots of new production.

Respectfully Submitted, Dave Clothier





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From The Manager

Dear Members,

For the first time in 12 years, we had to close the library due to weather. The snow was much needed and much appreciated moisture but I think we are all ready to have it melt away and get on with spring now. I apologize for any inconvenience this caused but with our on-line digital library, many of you just stayed in and worked online and I am so glad we can provide that service to our membership.

We have ramped up our scanning of the East Ranges so keep checking on-line to see what we have done. This will take awhile to finish but we will just keep plugging away until it is completed.



We also have 3 WSU geology students dedicated to the Foundation's Integration Project. They are making great progress and these files are being added to the paper files as well as the Walters Digital Library database. We love hiring students and we hope that by doing so, you will come in and meet them and if you are in a position to hire them away from us, we welcome you to do so. They learn a lot while working here in the library and we hope to give them the opportunity to find their "real jobs" out in the industry.

Last year we had discussed changing our Annual Picnic to sometime in the spring but one little problem.....we don't have a chair. So, if you would be interested in helping the Society, this is a fairly easy way to do so, step up and volunteer to chair this event.

On the cover of this issue are some photos from our Annual Banquet. We had a great time this year as always with great wining and dinning from the Petroleum Club.

Happy Spring to all of you and I hope you have great success in all your endeavors!

Respectfully submitted, *Rebecca Radford* Manager



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Profile — Anthony (Tony) Walton

This will be an interesting profile of a university professor who has a strong relationship and interest in the petroleum industry. Tony Walton was born April 10, 1943 in Moorestown, New Jersey. His father was a banker there and his mother was a housewife. He has a brother (Charles) who lives in Swedesboro, New Jersey, and had a sister (Beth Ann) who died in 1998.

Tony attended grade school and graduated from high school in Moorestown. In 1965 he received his BA Degree from Lafayette College located in Easton, Pennsylvania, where he lettered in swimming. He enrolled at the University of Texas, Austin, receiving an MA Degree in 1968 and his PhD in 1972. During his time at Austin he was acquainted and a friend of both John Gries, recently deceased, and Robbie Gries, John's wife at that time. When asked which professor influenced him the most and which professor was the "biggest character: his answer is the same, Dr. Bob Folk, University of Texas. Following active participation in the ROTC, he spent three months in the U. S. Army. After completion of his higher education, he spent a summer working for the Bureau of Economic Geology, Austin. Dr. Walton was then a professor of Geology at Vanderbilt University for three years. He also worked in uranium exploration in Caspar, Wyoming for Conoco for a summer.



In 1969 he married Ann Kershner of Houston. They have two children: Steven, residing in Olathe, Kansas, and Betsy, who resides in Portland, Oregon. Steven has a son and Betsy has twin girls now 16 months old.

Tony teaches Introductory Geology, Petroleum and Subsurface Geology, Volcanology, Petroleum Engineering Design (which is also a geology course), and a graduate course in interpreting sandstone deposits. The petroleum courses make extensive use of industry standard computer programs to analyze data from real oil fields. In 1998, he started a new course, Geology 360, Field Investigations, as a means of introducing beginning geology students—freshmen and sophomores—to real rocks. The two-week trip travels across Kansas, Colorado, Utah, and Wyoming visiting many different and geologically important sites.

His research has focused on stratigraphy, deposition, and diagenesis of sedimentary rocks, especially sandstones and sedimentary rocks that contain lots of material from volcanoes, in addition to recent efforts to understand and elucidate oil reservoirs in Kansas. From 1987 until 1999, he was Chair of the Department of Geology at KU. He has served on many committees associated with the University. He is a long-time member of the Board of Directors of DOSECC, Inc. and has served as its chairman. DOSECC is an international consortium of universities that has been an advocate for continental scientific drilling and has implemented several projects using specialized equipment and in difficult environments. He has been active in the Rotary Club. His other activities include yard work and reading, and it appears that he is a voracious reader.

When asked why he became a geologist and commenced this career, his answer is that he made the decision while still enrolled in High School, and you are able discern while visiting with him that he has never regretted that decision. At 70, the question of his retirement sometimes comes up. While looking forward to retirement in a few years, he is enjoying the courses he teaches for the present and hopes to remain active in the petroleum geology of Kansas as well as geology more generally in the future.

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CALL FOR PAPERS NOW OPEN!

American Association of Petroleum Geologists MID-CONTINENT SECTION MEETING 2013 New Technology Integration – Mature Petroleum Regions (Deadline for Abstracts is Friday, March 15, 2013)

Presenters may submit preference for an oral or poster presentation. Abstracts will be considered for either oral or poster session unless otherwise designated by the author. NOTE: There will be a separate poster session on Tuesday for the Mississippian Symposium.

See website to submit abstracts: aapgmcs.org

Core Workshop

Chairman Martin Dubois invites you to contribute to a Core Workshop to be held on Sunday, October 13 from 9:30-4:30 pm. Please <u>contact Martin</u> about your intent to participate and then please submit an abstract that includes background and significance of the core by clicking on the "Create Core Workshop Abstract" button below.

Mississippian Symposium

This special symposium will be held on Tuesday October 15, consisting of an oral and poster session. Papers will feature Mississippian exploration, oil/gas reservoir facies and depositional systems, diagenesis and porosity evolution, reservoir completion/engineering practices, and reservoir stimulation practices. Submit an abstract for the Symposium by clicking on the "Create Mississippian Symposium Abstract" button below. Please contact Chair <u>Sal Mazzullo</u> for more information.

Oral Presentations

Two concurrent oral sessions will presented on Monday October 14 and one session on Tuesday, October 15, concurrent with the Mississippian Symposium. Themes of the sessions are listed below.

Students are most welcome to participate in sessions and will be so noted in the program. Student papers will be eligible for Robert Cowdery Best Student Poster and Oral Awards.

Contact: W. Lynn Watney, 785-864-2184.

General Poster Session

Presentation on any of the themes listed below are permissible and welcomed. Contact Poster Chair <u>Ernie Morrison</u>, 316-264 -6366, for additional information.

Kansas Geological Society Board Minutes

The monthly meeting of the Board of Directors of the Kansas Geological Society was held on January 8, 2013 at the Wichita Petroleum Club. Mr. Clothier called the meeting to order at 11:40 AM.

FINANCIAL REPORT/MANAGERS REPORT

- A. <u>Treasurer's Report</u>- Mrs. Radford presented us with the Treasurer's report for December 2012. Mrs. Radford reported that the current CD's earned estimated \$652.30 interest. The next CD to mature will be on 4/1/2013 at the Andover State Bank. Mrs. Radford reported that the Rose Hill Bank CD matured on 12/17/2012, those funds were deposited in the Intrust Bank Money Market account. Incoming Treasurer, Bob Bayer, will shop for CD rates.
- B. <u>Manager's Report</u>- Mrs. Radford presented the Manager's Report for December 2012. Monthly income was \$69,247.13 and expenses were \$49,551.10, making the profit \$19,696.03 for the month. The reports shows, 776 total members, 325 Library members and 246 Walters Digital Library members. Digital Library still growing, but income was down slightly.

OLD BUSINESS

<u>Update on Building Auction</u> – Mrs. Radford will contact moving companies to get estimate on cost moving of library in order to have all of our options available for discussion as the year progresses towards the end of our lease on Dec. 31, 2013.

NEW BUSINESS

B. Auction on building (1/11/2013): No minimum bid; auctioneer says new buyers would want to keep ten ants; how much are the liens against the property?; elevators must be fixed; cleaning company has not been paid since August, stopped work; building is roughly ½ occupied. Current KGS lease on building is strong until end of 2013, rent is \$6872/mo; KGS has option to renew for another five years. Mr. Clothier moved to have a *wait & see* policy, citing no advantage to owning the building; motion was passed. Mrs. Radford and Mr. Ramondetta plan to attend auction. If new owners are strong in maintaining building, KGS might renew lease for another five years. Mr. Clothier further moved to form a *New Building Committee* to study the feasibility of moving the library prior to lease expiration, be cause 1- fewer people use the actual building, instead use digital library; 2-make access & parking easier; 3- design new building to allow for technical talks. A new facility would require at least 13,000 sq ft. Sample Library might want to join this venture. Motion to form committee was passed. Chuck Brewer will head up this committee and is studying options.

Mr. Clothier adjourned the meeting at approximately 1:45 PM.

Respectfully submitted, Paul Ramondetta-Secretary

The monthly meeting of the Board of Directors of the Kansas Geological Society was held on February 12, 2013 at the Wichita Petroleum Club. Mr. Clothier called the meeting to order at 11:17 AM.

FINANCIAL REPORT/MANAGERS REPORT

- A. <u>Treasurer's Report</u>- Mr. Fisher presented us with the Treasurer's report for January 2013. Mr. Fisher reported that the current CD's earned estimated \$521.73 interest.
- B. <u>Manager's Report</u>- Mrs. Radford presented the Manager's Report for January 2013. Monthly income was \$58,631.46 and expenses were \$66,949.86, making the loss \$8,318.40 for the month. The reports shows, 726 total members, 135 Library members and ? Walters Digital Library members. The Digital Library earned \$22,299.00 after expenses. The paper library lost \$8,318.40

OLD BUSINESS

Auction on building (1/11/2012). Mrs. Radford and Mr. Ramondetta attended. Building sold, new landlord is expected be cooperative.

NEW BUSINESS

Tim Hellman is on a committee to study possible purchase of building at 154 N. Topeka. Listed for \$495,000 with 16,112 sq ft. Cost of moving is being studied. Present lease expires at end of the year, but there is an option to renew for another five years. Decision must be made well in advance of the current lease termination... Chuck Brewer is studying options.

ADJOURNMENT- Mr. Clothier adjourned the meeting at approximately 1:15 PM.

Respectfully submitted, Paul Ramondetta-Secretary

A DIFFERENT VIEW OF GEOLOGIC TIME

Lawrence H. Skelton, Geologist

Wichita, Kansas

If geologic time, the 4.54 billion years since the Earth began, could be reduced to a period of just a single year, the calendar of events would be as follows:

January 1 -- 12:00 A.M. – the earth is formed: a molten sphere, too hot for any liquid water or plant or animal. The **Hadean Era of the Precambrian Eon** is underway. During the 740 million years until the Hadean ends, the earth will cool and form a crust. Gravity segregates the heavier metals that sink and form a core. Volcanoes are the rule of the day. Cooling is continuous and when the temperature drops below100°C. (212°F.), condensed water rains down and creates rivers, lakes and seas in low areas. The earth is pelted by big and small meteorites. One of these, of small planet size, whacks the earth in passing and knocks off a chunk which spins outward a couple of hundred thousand miles and becomes a moon.

February 28 -- 11:50 A.M. – the **Archean Era** begins. Some rocks from this time are preserved until the present. The earth is spinning faster than at present and a "day" is less than the 24 hours we presently experience. The first prokaryotes (single-cell organisms lacking a nucleus) appear. The atmosphere is composed mostly of methane, nitrogen and carbon dioxide which causes the sky to appear red. Banded iron formations (chert/jasper and hematite/magnetite) are being deposited at many places and indicate presence of enough oxygen to bond with iron. Late in the era, proto-continents begin forming up and possibly photosynthesis-capable algae appear on the scene.

June 12—3:56 P.M.– The **Paleoproterozoic Era** arrives and the earth's land surface is still barren of any life. Prokaryotes dominate but about midway through this era, the first possible Eukaryotes (cells with a nucleus) appear. About halfway through the era, what is present South Africa is whacked by a 10 km (6 mile) diameter meteorite leaving the yet visible 250 km (155 mile) wide Vredefort Crater. 150 million years later, another big meteor slams into an area which now is Sudbury, Ontario, Canada, leaving a 200 km (ca. 125 mile) wide crater. The first three hundred million years experience something new: worldwide glaciation – the so-called Huronian glaciation that occurred in three separate glacial events. One result was an increase in atmospheric oxygen from perhaps 0.5 to 0.7% to around 3.5% that oxidized much of the atmospheric methane. Red beds are common and indicate presence of oxygen. Photosynthesis is encouraged and cyanobacteria ("blue-green algae") proliferate forming stromatolites. The increased oxygen oxidizes much of the sulfur in seawater and the first gypsum/anhydrite deposits precipitate. The Columbia mega-continent assembles and breaks-up over a 300 million year time frame during this lengthy era.

August 24 – 12:20 A.M. -- Time marches on! 3.4 billion years have elapsed since New Year Day. The Mesoproterozoic Era is here. Breakup of Columbia is complete and the megacontinent of Rodinia is assembled with its parts. Thrusting of assembling continental blocks onto the eastern and southern edges of Laurentia result in the Grenville Orogeny, making the proto--Adirondack and proto--Appalachian Mountain chains. The portion of Rodinia that is now the central United States begins to rift threatening to split the continent. Fortunately this "Mid-Continent Rift" fails to break completely. Single-cell acritarchs are present. During the later Mesoproterozoic, definite eukaryotic cells capable of sexual reproduction are present and stromatolites still thrive.

October 11 – 6:01A.M. – It's the Neoproterozoic Era! During the first third, Rodinia breaks up. Acritarchs increase in both variety and numbers. The pieces resulting from Rodinia's breakup have drifted and are clustered around the South and North Pole. The breakup creates the proto-Pacific Ocean known to geology as the Panthalassic Ocean. At the start of the Middle Proterozoic - known as the Cryogenian Period, about 750 million years ago, world-wide glaciation begins in both continental clusters and spreads toward the Equator. Nearly the whole earth is covered with ice ("Snowball Earth"). There are at least two separate glacial advances and retreats during the next 215 million years. Glaciation seems to accelerate organic development and by the end of the Cryogenian, acritarchs have become diverse, calcium carbonate absorbing red algae have appeared, dinoflagellates have provided a chemical record of existence, ciliate protozoa such as paramecia are present as are testate (shelled) amoebae and possible fungi have "made the scene." Simple corals, sea anemones and sponges make their first appearance. The land surface however remains barren. The Neoproterozoic winds up with the Ediacaran (aka Vendian) Period starting about 630 million years ago. During the next 30 million or so years, tectonic shifting recombines the continents into a mass named Pannotia clustered around the Equator. Acritarchs and stromatolites are decimated, probably by effects of glaciation but other life forms thrive. Additionally, a variety of bizarre, soft-bodied, multicellular animals of uncertain affinity (the Ediacaran fauna) are found in 20 or so locations around the world. Some are obvious worms and others represent jellyfish and other later phyla. The first lichens (a fungus-alga association) are forming on land. Some other life forms would become extinct by the approaching Cambrian Period. Very late in the Ediacaran Period, Pannotia begins to break apart.

Note: This is the first of a series. The next portion will be in the May-June Bulletin.

Memorials

Dr. John Gries With the death of John Gries, the profession, industry and Wichita State all suffered a great loss. John was truly one of the outstanding geologists of this area.

John was born in Rapid City, South Dakota and as the son of Paul Gries, was fortunate in having an early exposure to geology as his dad was a very distinguished professor of geology at South Dakota School of Mines.

After John graduated from Rapid City High School, he enrolled at The University of Wyoming where he received degrees in Engineering and Geology. In 1970 he received his PhD from the University of Texas.

In 1968 while at the University of Texas, he met and married Robbie Rice. Although they were later divorced, they have remained friends throughout the years. Their daughter, Lynn graduated from medical school and now practices and teaches trauma surgery at the University of Arizona School of Medicine, Tucson.

After John received his PhD he taught for one semester at the University of Texas. and also worked for a short time at the Bureau of Economic Geology in Austin. John began teaching at Wichita State in 1971. During his 41 plus years he has taught many different courses, but has specialized in Structural Geology, Field Methods and Geohydrology.

John has served many terms as Head of the Department of Geology and over the years has led the 5-week Field Camp many times. His many activities with the department has not prevented John from lending his very extensive talents to many other entities. He has been the founder and President of the Great Plains Transportation Museum, He also has been the Technical Advisor to the City Manager on Groundwater Pollution as well as working n pollution issues at McConnell Air Force Base. In recent times he developed an interest in Blacksmithing and is a member of the Great Plains Blacksmithing Association. John recently received the prestigious, Teacher of the Year Award from the Kansas Geological Foundation. Many of these activities have involved his

Brian Kirby Former Kansas Geological Society President died January 30, 2013 in Glendale, Arizona at the age of 91. Brian had been President in 1954. He was born in Duncan, Oklahoma on September16, 1921 and graduated from Great Bend High School in1939. He served his country as a U. S. Marine from 1942-1946. He graduated from Wichita State in 1948. After graduation Brian joined Sunray Petroleum in 1948 and later was employed by Bay Petroleum. In 1959, now with Tenneco, he transferred to Durango, Colorado where he was elected President of the Durango Petroleum Club. He was very active in local politics and other activities in Durango until he joined Arkansas, Louisiana Gas Company in Holbrook, Arizona. From 1972 until his retirement in 1989, he was a Hydrologist with the State of Arizona.

Brian is survived by four children: Debora Woodrome, Phoenix, Kimberly Friend, Prescott, Arizona, Robert Brian Kirby, Glendale, Arizona, and Bradford Kirby, Sacramento, California. 10 Grandchildren and 14 Great Grandchildren also survive Services for Brian were held on February 2, 2013. and the Arizona Hospice was the designated memorial contributions recipient.









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Exploration Highlights

By John H. Morrison, III Independent Oil & Gas



(1) SDOCO LLC, Littleton (CO), has established the Rees Ranch oil field in Wichita County. The 7-19 Rees Ranch, (API 15-203-20191), located in the E/2 W/2 NE of section 19- T19s- R35W, is producing an undisclosed amount of oil from an unknown zone. The well had initially targeted the Mississippian formation as the main zone of interest, however, the Lansing-Kansas City, Marmaton and Cherokee (Johnson Zone) zones are also of interest in the immediate area. Operator stopped drilling at a total depth of 5260 ft. No details have been released.

(2) The Rees Ranch oil discovery lies nearly five miles from the closest recognized oil production in the county. SDOCO LLC has already drilled one offset well and has staked a third well in the quarter-section. Lario Oil & Gas Company, Wichita (KS), has drilled one offset and staked a second well about one-quarter mile to the north of the discovery well in section 18. The new unnamed oil field is located about six and one-half miles south of the Marienthal, Kansas.

(3) Apache Corporation, Houston (TX), has successfully completed their first horizontal well in the State with the completion of the 31-41-1H Zerr (API 15-179-21307), spotted 160 ft FNL & 2655 ft FEL of section 31-T10s- R28W, in Sheridan County, northwest Kansas. The wildcat well found new Mississippian limestone reserves nearly one and one-quarter miles south of oil production in the RJS South field (Lansing-Kansas City oil), and same

distance northwest of oil production in the Grainfield pool (also LKC oil) in Gove County. Closest known Mississippian production lies over twelve miles away from discovery site. The well was drilled to a true measured depth of 8367 ft with the lateral running in a southerly direction to around 330 ft FSL & 2738 ft FEL in the same section. Details are confidential. Field area lies about two miles north of Grainfield, Kansas.

(4) Redland Resources, Inc., Oklahoma City (OK), has discovered Mississippian oil deposits with the completion of the 35-4 Gleason API 15-083-21799), located in the SE NW NW of section 35- T23s- R25W, Hodgeman County. The wildcat well found new oil reserves at site located nearly one and one-quarter miles west of the Gray Hawk Northwest field. Redland established the field in mid 2011 when the 25-1 Andrew (API 15-083-21709) was completed for 120 barrels of oil per day from Mississippian depth of 4752 to 4756 ft. No completion details have been released on the new Gray Hawk West pool discovery. Duke Drilling tools bottomed the well at a total depth of 4950 ft. Field area lies about four miles south and seven miles west of Jetmore, Kansas.

(5) Hartman Oil Company, Inc., Wichita (KS), is producing an unknown amount of crude oil from the Marmaton formation at the 1-22 Wilkinson (API 15-171-20913), located in approximately SE SW SW in section 22-T17s-R34W, in Scott County. H2 Drilling tools drilled the well to a total depth of 4950 ft at site located over one and

one-quarter miles northeast of Marmaton pay in the Isbel Northwest field, or about four and one-half miles north of the town of Modoc, Kansas. Completion details remain confidential. The new field has been named Isbel North.

(6) Hertel Oil Company, Inc., Hays (KS), reports the discovery of Lansing-Kansas City oil deposits at their 1 Larry (API 15-051-26400) in the NE SE NE of section 15- T15s- R19W, Ellis County. Operator stepped-out over one and one-quarter miles northwest of production in the multipay Martina oil field to find the new reserves. Discovery Drilling's Rig 4 drilled the well to a total depth of 3700 ft. The new Martina North field is situated about two and one-half miles north and four miles west of Schoenchen, Kansas.

(7) SandRidge Exploration and Production LLC, Oklahoma City (OK), has established another Mississippian oil field in southeastern Harper County with the completion of the 1-7H Turner 3406 which was drilled over one and onequarter miles from closest producing wells in the area. Well site is located 250 ft FSL & 660 ft FEL of section 7- T34s-R6W, about three and one-half miles southeast of Harper, Kansas. Lariat Services Rig 39 drilled the horizontal lateral in a northerly direction to a measured depth (MD) of 11,534 ft. Bottom hole location was 2265 ft FSL & 668 ft FEL in section 6. 'Toe' of the lateral was called at a true vertical depth of 4580 ft. The wildcat well is producing an undisclosed amount of crude from liner perforations made extending from 5316 to 11,002 ft (MD).Completion details are confidential. The new field has been named Wildcat Creek North.

(8) Elsewhere in Finney County, SandRidge has stepped-out over one mile to the east of the multipay oil and gas production in the Stewart field to locate new Mississippian oil reserves. Discovery was made at the 1-9H Lorimer 2330, located 200 ft FNL & 400 ft FWL in section 9- T23s- R30W. Lateral was drilled in a southerly direction ending 337 ft FSL & 567 ft FWL in section 9. Measured depth of the lateral was 9242 ft with 'toe' being called at 4828.27 ft in vertical depth. The liner was perforated from a measured depth between 5111 to 8889 ft. Details are confidential. The new Stewart East oil field lies about six miles north and 12 miles east of Garden City, Kansas.

(9) In conclusion, SandRidge has established a new Mississippian oil field in eastern Harper County. The 1-27H Cooper 3305, located 250 ft FNL & 660 ft FEL in section 27- T33s- R5W, is producing an unknown amount of crude from perforated liner between 4930 to 8098 ft. Operator drilled the horizontal well to a measured depth of 8518 ft with lateral 'toe' called at 4491 ft vertical depth. The lateral ended 608 ft FSL & 663' FEL in the same section. Completion details are confidential. The new Spring Branch oil field area lies over three miles east of the Stohrville Northeast oil and gas field, or five and one-half miles northeast of Bluff City, Kansas.

(10) Encana Oil & Gas (USA), Plano (TX), has completed their third horizontal well in Ness County, and their fourth horizontal well in Kansas, with the completion of the 2-1H Kerr, spotted 249 ft FSL & 1989 ft FEL in section 1-T20s-R25W. The well found new oil reserves one and one quarter miles northeast of the Guzzlers Gulch North (Marmaton, Cherokee, Mississippian) oil field. The new field has been named Wesley South. Precision Drilling tools drilled the horizontal lateral to a bottom hole location (BHL) in the north half of the section. Exact end was not reported, however, the proposed BHL location was 330 ft FNL & 2150 ft FEL. Top of the Mississippian formation was called at 4711 (-2339 kb) and true measured depth reached 8805 ft. Perforation depths were not released. Field area is located seven and one-half miles southeast of Laird, Kansas.







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Dean C. Schaake	03/00	2000	Harold (Hal) Brown	10/10	2010
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