



KANSAS GEOLOGICAL SOCIETY

BULLETIN

Volume 92 Number 2

March-April 2017

Established 1925

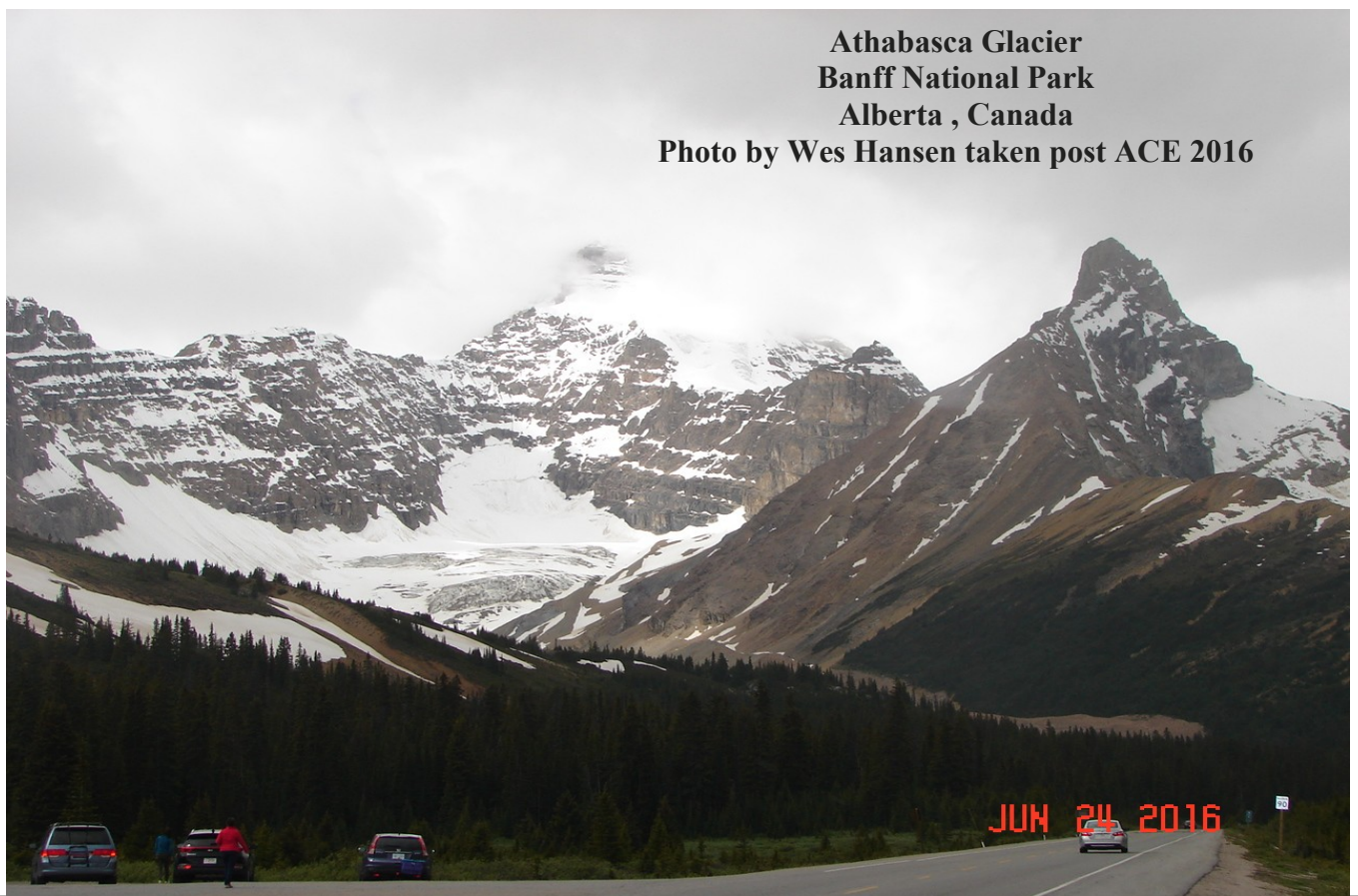
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Athabasca Glacier
Banff National Park
Alberta , Canada
Photo by Wes Hansen taken post ACE 2016





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*Photo of the Athabasca Glacier, Banff National Park
Alberta, Canada (taken post ACE 2016)*

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 manager@kgslibrary.com 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 <http://www.kgslibrary.com>

SOCIETY Technical Meetings

KGS 2017 Technical Talks

March 7 Preston Doll *"Influence of the Pratt Anticline and Uplift on the Geometry of Mississippian Carbonate Depositional Packages, Mid-Continent USA"*

March 21 Film Presentation *"James Hutton : Deep Time "William Smith and the Map that Changed The World"*

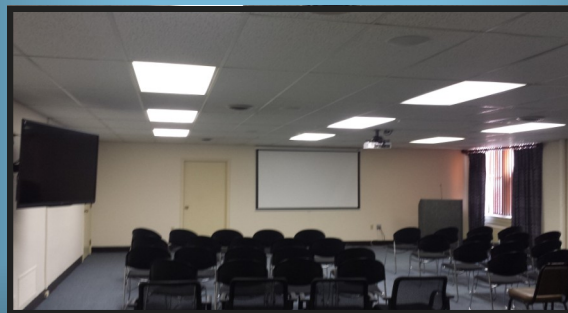
April 6 Dick Stoneburner *"Joint meeting with SIPES@ Petroleum Club – Lunch Optional"*

April 18 **Bob Goldstein** *"Thermal History of the Mid-Continent"*

May 2 Film Presentation *"PBS Nova: Life's Rocky Start"*

Please remember to check the website for the most up to date information on Technical Talks
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*Tech Talks are held at Landmark Square
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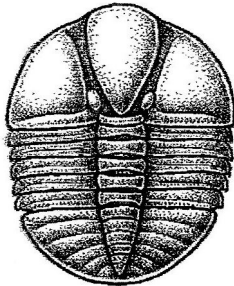
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**Randy Lilak correctly identified
 The last one as: Harpides**

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President's Letter

Greetings to all KGS Members!

Spring is upon us! In nature it is a time of renewal after winter dormancy, a rebirth of the living.

Likewise, the society will move forward in its quest for a permanent library manager after a long period of winter chill; the process has already started. Tammy Nichols has been designated the interim manager; she brings many years of experience at the KGS library to the forefront, and I have the utmost confidence in her and her staff of three (Rhonda, Angela, and Janice). The familiar faces we see year after year are the backbone of this society, and provide a basis for stability during both prosperous and poor times.

At the moment, we remain financially strong... no debt and over a million dollars in the bank. The rising stock market has enhanced the value of our various mutual funds, while increased library business has changed the operational red ink of 2015 and part of 2016 into black ink. This recovery began during the second half of 2016, and seems to be accelerating.

Trying to predict the future is a fool's errand, but we do have real cause to be optimistic. Our large and complex collection of data is both unique and diverse. Both paper and digital records will ensure our continued relevancy well into the future. We continue to add to it as large data donations continue to pour in, and must then be integrated to our collection through the efforts of the employees of both the Society and Foundation. It is a priceless irreplaceable asset of great historical and modern importance that is certainly worth fighting for as we maintain the local control that has served us well for nearly a century. I am committed to further enrichment of our collection and service to the public.

May this new Spring season bring you a surge of energy and optimism as we all strive to renew our efforts to enrich the Kansas oil & gas industry!



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Honorary Member, Roger Martin, presented with his hammer by Frank Mize



Doug Davis, banquet chairman, Dottie Schiltz, Joann and Paul Pamondetta, KGS President



Past president, Tim Hellman, receiving his hammer from Frank Mize



Frank and Barbara Mize/Tim and Brenda Hellman



Tim Hellman, past president, with other past presidents in attendance



Past Honorary members in attendance

**Robert Cowdery, Don Beauchamp, Roger McCoy, Doug Davis, Debra Fitzgerald, Kent Crisler and Robert O'Dell
with Roger Martin in the foreground**



Brian Fisher presenting Dr. MacFarlane with his award and check from the KGF

The Kansas Geological Foundation (KGF) presented The Outstanding Earth Science Teacher of the Year award for 2016 and a \$1,000.00 check to Dr. P. Allen Macfarlane at the Kansas Geological Society banquet held in Wichita, KS on January 27, 2017.

This award is given to an earth science educator in Kansas who demonstrates a unique style and enthusiasm for teaching students about science.

Dr. Macfarlane currently teaches 6th, 7th, & 8th grade science at Topeka Collegiate School and incorporates numerous laboratory and field activities to simulate real world science applications. He also co-founded the KU Environmental Science Academy, has taught a wide range of science classes from elementary to college, and leads workshops to help other teachers better understand and include field and lab related activities into their own classrooms.

These are only a few of the many highlights from an impressive resume of academic and professional educational accomplishments. KGF is pleased to honor such a deserving individual in appreciation for his contribution to teaching. This year's award winner was submitted by KESTA (Kansas Earth Science Teachers Association). We thank them for such an exceptional nominee. (article submitted by Monica Williams on behalf of the KGF)

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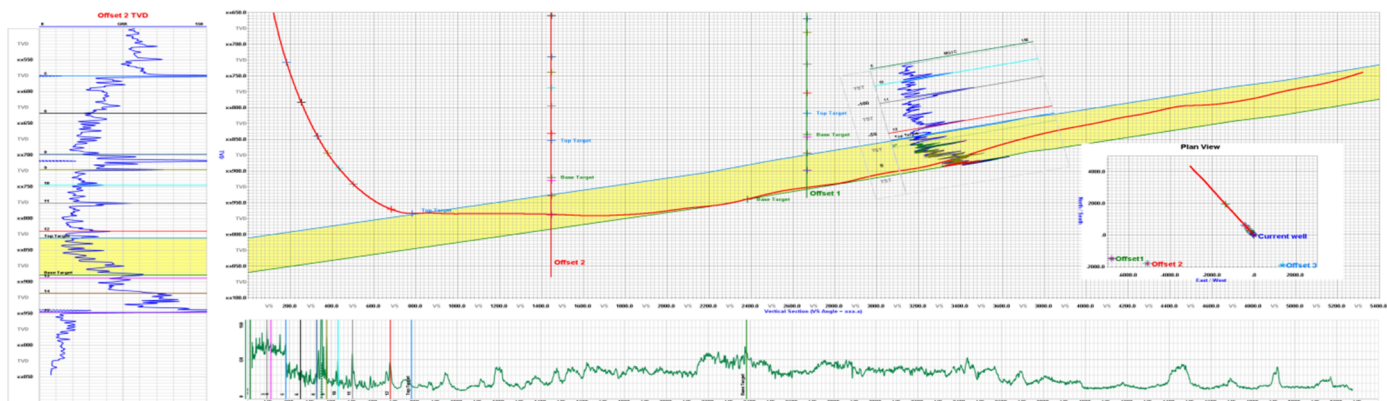
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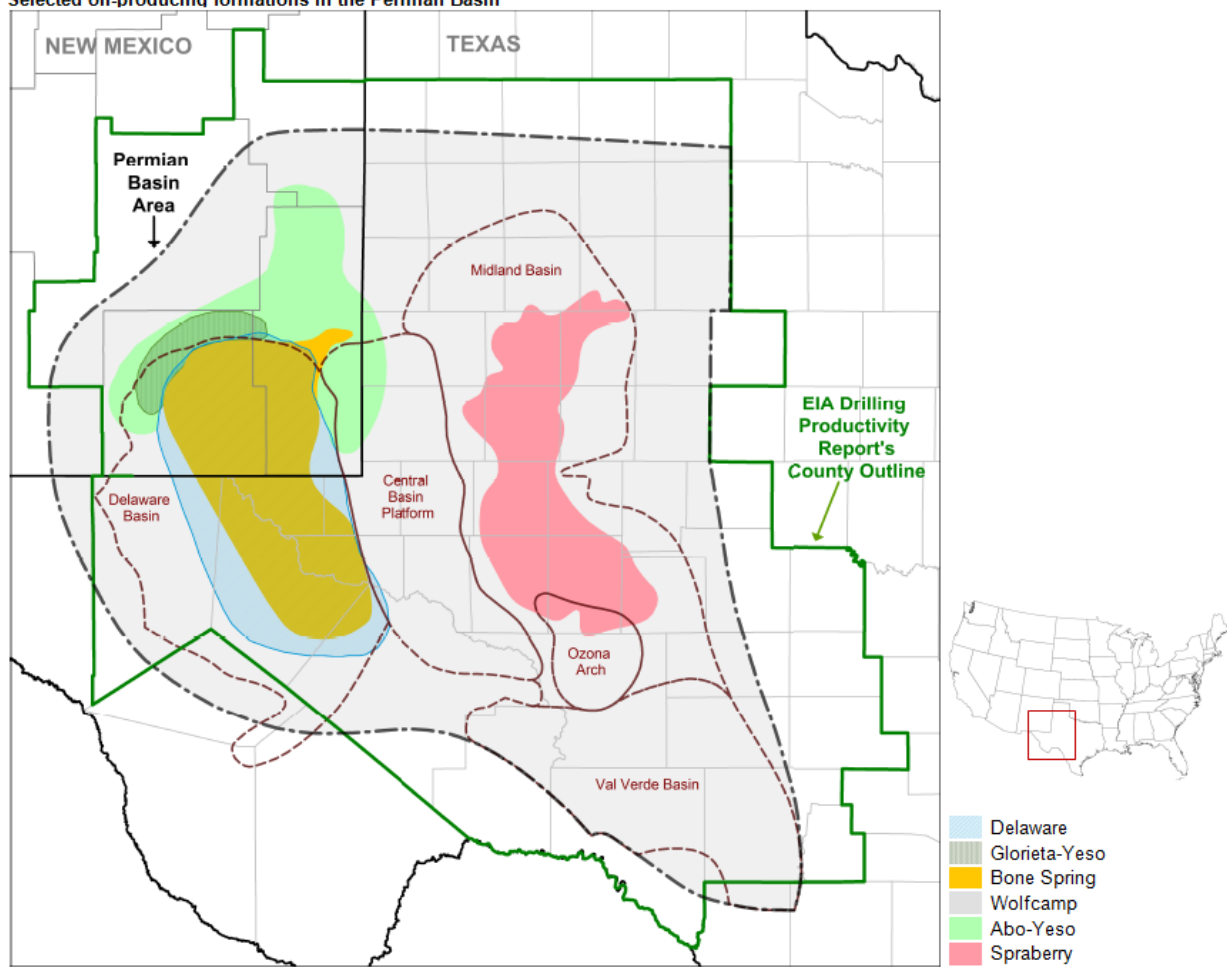
Permian Basin: A look to satisfy my curiosity

By Ernie Morrison

Over the last few years, since the decline in the price of oil, I have been hearing about the Permian Basin. As a geologist that works the mid-continent with some light experience in the Permian, I thought to look into it with a thought to find out why it is booming. I went on the internet and found many articles on the petroleum geology, stratigraphy and what is happening as far as acreage prices. AAPG, USGS, The University of Texas, Texas Railroad Commission and even Wikipedia have a wealth of information.

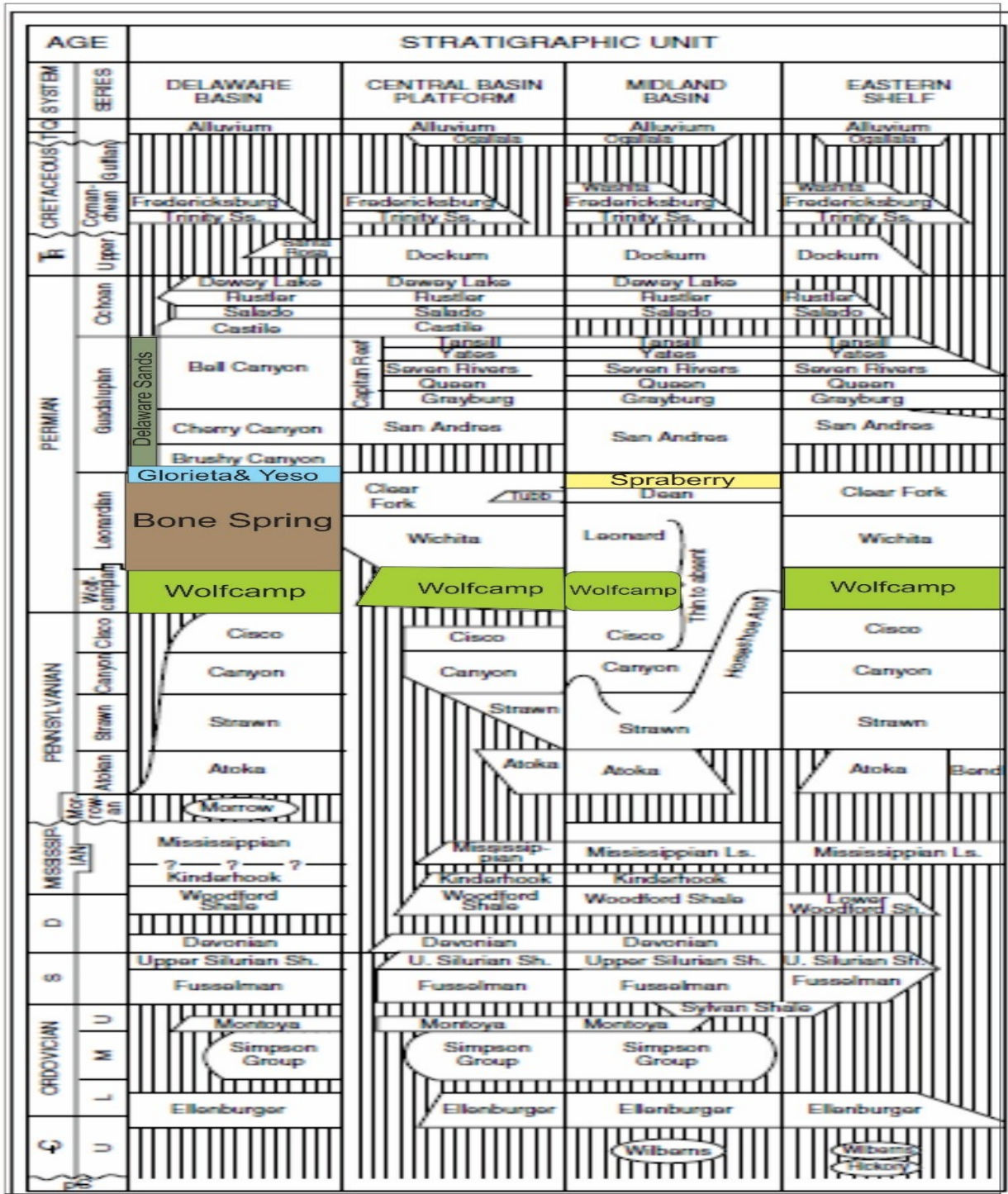
The Permian basin region encompasses an area approximately 250 miles wide and 300 miles long. The Midland Basin is on the Texas side while the Delaware Basin on the west is in southeast New Mexico and West Texas. The Central Basin Platform separates the two basins. Production is spread across the whole basin. The size of production has become more than 2 million barrels per day and is comparable to the Giant Saudi Arabian Ghawer Field. The Ghawer Field is the world's largest conventional field in the world and accounts for over one half of Saudi Arabia cumulative production. It will take a while to get up to the 5 million barrels a day the Ghawer Field produces.

Selected oil-producing formations in the Permian Basin



After US Energy Information Administration. 2014

The Permian Basin, although made up of separate geologic entities is often referred to as one oil producing entity. The basin, according to the Texas Railroad Commission, is composed of over 7,000 RRC Fields in Texas alone.



After M.M.Ball. USGS.

Producing formations include: Yates, San Andres, Clear Fork, Spraberry Wolfcamp, Yeso, Bone Spring, Avalon, Canyon, Morrow, Devonian and the Ellenburger. Oil and gas production ranges in depth from a few hundred feet to

over 20,000 feet in the deepest portion of the basin. This basin has produced over 21 billion barrels since production began in 1921.

In a January New York Times, under their Energy and Environment, had the headline "Land Rush in Permian Basin, Where Oil is Stacked like a Layer Cake". The "layer cake" formations the Times refers to are the six formations that are primarily responsible for the increase in oil production. These formations are all of Permian age:

Delaware: Generally tight channel sandstones that are a combination of structural and stratigraphic in nature. Now a horizontal play with tight sandstone up to 50'

Glorieta/Yeso: Made up of sandstones, siltstones and shales. Now a horizontal play

Bone Spring: Primarily a limestone and sandstone with the sandstone being a target. Now a horizontal target for thinner sandstone and some tight limestones. Ranges in thickness from 2500' to 3500'

Wolfcamp: Shale-sandstone that is thick and has become one of the primary pays for the horizontal plays. From 2000' to 6000' and has at least 4 different pay zone (A, B, C and D) Drilling depths in the Delaware basin are 3500' to 5000' and 4000' to 11,000' in the Midland Basin. The porosity ranges from four to ten percent with an average of seven percent.

The lithology has about 36% quartz and this lends itself to fracture treatment. As was said, if the shale is squishy then it is bad for recovery but if it crunches it is good. The Wolfcamp crunches. Thank you, Kristie Ferguson.

Abo/Yeso: Sandstone and red shale with thin interbedded gypsum and limestone. Some of the sandstones are arkosic. Now a horizontal play

Spraberry: Sandstone and shale sequence with some interstitial limestone. One of the few formations I am familiar with. First drilled and productive on Abner Spraberrys land. It is thought to have retained 90% of its original reserves and is deposited as submarine fans.

In November of 2016, Wolfcamp was tagged as the largest continuous unconventional oil play that consists of undiscovered but technically recoverable resource. The USGS estimates 20 billion barrels of oil with 16 trillion cubic feet of gas; not to mention the 16 billion barrels of associated natural gas liquids. This play is three times larger than the continuous Bakken-Three Forks play.

As I looked over the material on the Internet, there is a poster and many articles written by H. Scott Hamlin and Robert W Baumgardner Jr. from the University of Texas. Their poster is great presentation of the Wolfberry. You may ask, what is the Wolfberry? It is the unconventional oil play in the Midland and Northern Val Verde Basin. The Wolfberry consists of the Spraberry/Dean sandstones along with the Wolfcamp/Upper Pennsylvanian Calcareous lithofacies. This total section is made up of alternating siliciclastic's and calcareous intervals having completions that are made up of massive multi-stage fracture jobs. Often 1,000-3,000 feet are perforated. It is the horizontal drilling with long laterals and new technology of fracture treatment that makes the "Wolfberry" and the other plays within the Permian Basin to work. Some portions of the basin are economic down to twenty-five dollars a barrel while the mainstay works down to forty dollars a barrel.

As with most horizontal plays 3D Seismic can and is used to help evaluate the plays, sweet spots and thicker sandstones. The seismic helps to avoid faults and keep the horizontal drill bit within the correct horizon. At the recent 3D seismic seminar, put on by the Denver Geophysical Society and the Rocky Mountain Association of Geologists, two papers were presented on the use of 3D seismic in the Permian.
In Conclusion.

Now that you have a taste of the oil production in the Permian basin, you may be ready to jump into the play. Before you go toward Texas, you may want to check a few things though. Occidental Petroleum is the leading producer with over 2.4 million acres, followed by Chevron with over 2 million acres, Apache with 1.7 million acres, Exxon/Mobil with 1.5 million acres and Concho Resources with over 700,000 acres. These are main producers among hundreds but others are getting into the play. Shell Oil has been making a push for more acreage after buying Chesapeake Energy's acreage in 2012. They also entered into a joint venture on with Anadarko on a 600,000 acre block. In addition, Shell has 300,000 acres of which 85% is considered core acreage with over 5,000 possible locations (www.shell.us/permian) PLS reports that Exxon made a purchase of acreage at an adjusted price of about \$20,000 per acre and feel this is a good number for the purchase of the acreage in New Mexico. Exxon has also bought out the Basses acreage for up to \$1 billion in cash. Last September, EOG Resources bought Yates Petroleum for \$2.5 billion which equates about \$9,000 per acre. Of course, there is some production with this acreage. Some acreage has cost as much as \$60,000 per acre. The play is good, but is it that good? Only time will tell.

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NOTICE!!!!
WSU GEOLOGY CLUB
& Papa John's Pizza

Papa John's offered WSU student organizations an opportunity to raise monies for their organizations.

The **WSU Geology Club** is participating
And **YOU** can help them!

When ordering pizza from Papa John's,
Use this code: **WSU004**
(those are zero's, not letter O)

With this code, the customer will receive 40% off their entire online order and WSU's AAPG Student Chapter will receive 10% of the money spent on the order.

Eating pizza tonight?
Let's help WSU Geology Club!

Monies raised will be used towards gas money to travel to local schools when they promote the geosciences to grade schools, registration costs for workshops, seminars and AAPG Student Expos, and social and academic events like an upcoming "Lunch and Learn" series next fall.

**We Invite You
To join**

**Kansas
Geological
Foundation**

**\$50.00 membership is
tax deductible**

Call 316-265-8676

**Or send checks to:
Kansas Geological Foundation
212 N. Market, Ste. 100
Wichita, KS 67202**

The Following Are For Sale

Kansas Completion Cards:
Several sets (call for more information)

Oklahoma Completion Cards

New Mexico Completion Cards

North Dakota Completion Cards

Utah Completion Cards

Microfiche Electric Logs

**Kansas
Oklahoma
Texas**

Geological Office Furniture:

- 8-drawer completion card cabinets
- 7-drawer cabinets
- Map cabinets—metal—2 available
- Map racks—different sizes

Call: 316-265-8676
Ask for Ted

Missing reference books and periodicals from the KGS Resource Room

I'm channeling the spirit of my dear departed friend Bob Slamal. Bob was determined to organize all of the text books, survey bulletins and various publications that are in the resource room at the KGS Library. He spent countless hours on his own time to accomplish this task. Many years back, before his untimely death, he instituted a checkout policy for these materials. Cards were filled out with the borrowers name and publication, then placed in an envelope on the shelf where the publication was removed.

Recently I noticed many of these envelopes on the shelves and began to peruse them. Many items have been gone for years. I'm asking that each member check your reference materials for these missing items. I'm sure they will be marked as KGS property.

Please help me in this endeavor.

Wes Hansen
Editor

The KGS Library is pleased to announce a new service



Creating
LAS files
from our logs
or yours

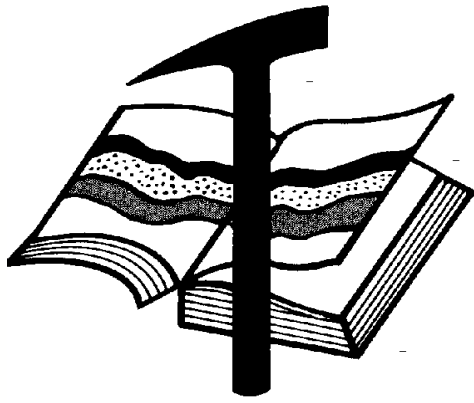
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316-265-8676

The Kansas Geological Society maintains its ownership and copyright when converting library log files to LAS



Kansas Geological Foundation

Web Site: www.kgfoundation.org

**212 North Market
Wichita, Kansas 67202**

A not-for-profit educational and scientific corporation

GOALS:

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

PLEASE HELP SUPPORT THE FOUNDATION

Kansas Geological Foundation Services

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

Speaker's Bureau

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

DVD/Videotape Library

The KGF maintains a DVD & 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	\$ 100 to \$ 499
\$500 Club	\$ 500 to \$ 999
Millennium Club	\$1000 to \$5000
President's Club	\$5000 and over

Kansas Geological Foundation

Cornerstone

Kansas Geological Foundation News

KGF Spring 2017 Scholarship Recipients

Lauren Haga of University of Kansas \$500—Knighton Scholarship
Adam Lane and Ryan Keast of Kansas State University -
\$500 each—Robert Cowdery Scholarships

Other Recipients ;

Nicholas Hixon - Fort Hays State University - \$500
Luke Rijfkogel - Fort Hays State University - \$500
Amy Olson - University of Kansas - \$500
Sarah Lamm - Kansas State University - \$500

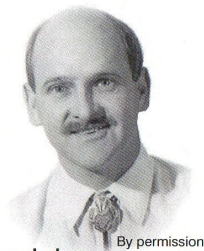
2017 KGF Grants

No grant requests were received

Educator/Teacher Award for 2016

Dr. P. Allen MacFarlane was the only nominee from KESTA - \$1,000 cash award plus
2 meals at the KGS Annual Banquet

The Kansas Geological Foundation Needs You!



The KGF provides the financial resources to sort, process and file, in-kind donations of geological data at the KGS library. Due in large part to the KGF this unique and rare well of information is being made available to all. Please consider telling your company management and colleagues about the benefits of a library that continues expanding in part because of the KGF.

**We very much value and need
your financial support.**

KGF Officers and Board Members

President- Larry Richardson
Vice President - Marc Summervill
Treasurer - Wes Hansen
Secretary - Ken Wallace

Board Members

Monica Williams
Bryce Bidleman
Brian Fisher
Ken Leblanc

Kansas Geological Foundation News

Students: The KGF awards scholarships each December and May. Check with your department chairs for applications. You must submit complete applications by the deadline.

Applications for the Fall semester should be available from your geology department soon.

Grants to help with research on Kansas related geology are also considered for aid.

Kansas Geological Foundation Video / DVD Collection

The KGF has an extensive collection of videos available for check-out at no charge.

Only pay for shipping back.

These are ideal for classroom or general public viewing.

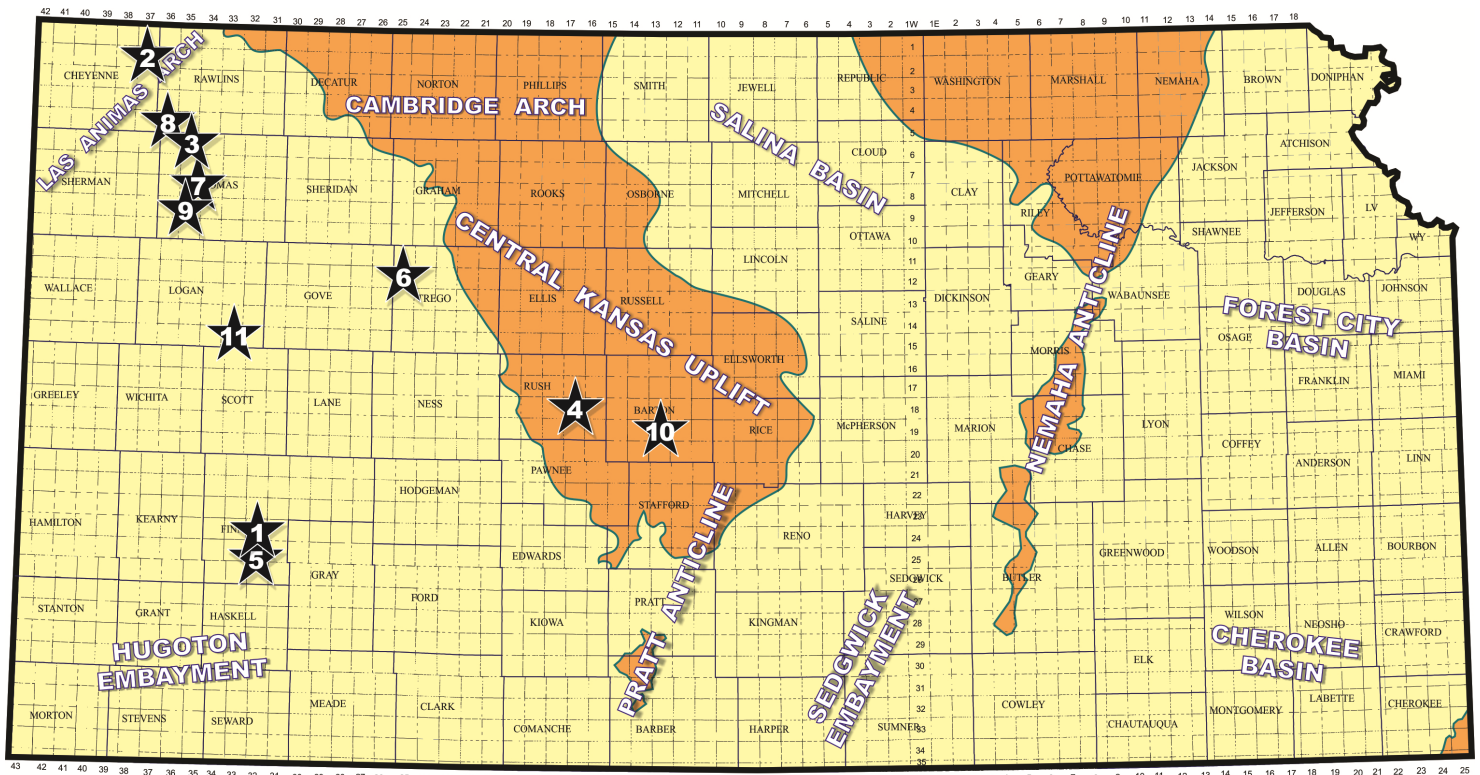
See the web for titles & descriptions
www.kgfoundation.org

Call 316-265-8676

Ask for Janice to check out videos

Robert F. Walters Digital Library
The most complete source for Kansas data
Database updated nightly
Day or Night
You can get to the data as you need it
www.kgslibrary.com
To Join: call 316-265-8676

The screenshot at the bottom shows a web-based interface with a search bar, a data table with columns for 'STATE', 'COUNTY', 'TOWNSHIP', 'SECTION', 'RANGE', and 'MERIDIAN', and a map of Kansas. The data table includes entries for various counties and townships, such as 'SARASOTA CO. TOWNSHIP 10S, RANGE 10E, MERIDIAN 10N'.



Map courtesy of Marc Summerville

1). Merit Energy Company LLC, Dallas (TX), reports a new Morrow oil discovery in Finney County, southwest Kansas. The #26-1 North Pebble, spotted in the SW/4 of section 26- T24s- R32W, found the oil deposits nearly three miles from known Morrow and Mississippian oil production in the Staley Northwest Field (2010). The remote wildcat was drilled to a total depth of 5,000 ft. Well site lies two and one-half miles northeast of the town of Garden City. The new oil field has not been named. (API 15-055-22436)

2). Murfin Drilling Company, Inc., Wichita (KS), has discovered oil deposits in the Shawnee (Oread) formation at the #1-12 McClurg in Cheyenne County, northwest Kansas. The 4,900-ft deep wildcat well is on the pump in the SE/4 of section 12- T2s- R37W, about 11 miles northeast of the town of Bird City. Operator located the reserves over three-quarters mile west of multi-pay production in the Brumm Northeast Field, which Murfin Drilling also established in January 2014. That field was opened after the #1-5 Kacirek Trust was completed for 100 bbls oil per day. (API 15-023-21455)

3). L. D. Drilling, Inc. of Great Bend (KS) has discovered a new oil field in Thomas County. The #1-29 Jerry, spotted in the SE/4 of section 29- T6s- R35W, is pumping 20 bbls of oil per day from perforations in the Marmaton (Pawnee) formation. Top of the Pawnee Limestone was logged at 4556 ft with total depth reaching 4,901 ft. The new discovery lies over 1.25 miles east of Marmaton oil production in the LD Field which L. D. Drilling also established earlier this year. The new LD East Field is located about eleven miles northwest of the town of Colby. (API 15-193-20978)

4). O'Brien Resources LLC of Shreveport (LA) has discovered new Arbuckle oil reserves at their #1 Besperat (33) in the NE/4 of section 33- T18s- R17W in Rush County. The wildcat well found the oil deposits at site located about two miles southwest of the town of Timken. The well was drilled to a total depth of 4,200 ft by Duke Drilling tools. Closest known production lies almost a mile away in the Timken Field (1952) which also produces oil from the Arbuckle formation. (API 15-165-22139)

5). American Warrior, Inc. of Garden City (KS) is producing oil from the Mississippian (St Louis) formation at the #1-24 Hicks A in Finney County, southwest Kansas. The 5,000 ft deep wildcat well establishes new oil production nearly two miles from

the Deadwood Field which American Warrior discovered in October last year. The new discovery is located in the NW/4 of section 24- T25s- R32W, about one mile south and six miles west of the town of Pierceville. (API 15-055-22447)

6). Phillips Exploration Company LLC, Andover (KS), is pumping 30 BOPD, no water, at their #1-4 SHR T. G. Miller well in Trego County. The new unnamed pool discovery establishes Lansing - Kansas City (2 zones) oil production at site in the SW/4 of section 4- T12s- R25W, about one-quarter mile south of the Collyer city limits. Murfin Drilling tools were used to drill the well to a total depth of 4,520 ft. (API 15-195-23007)

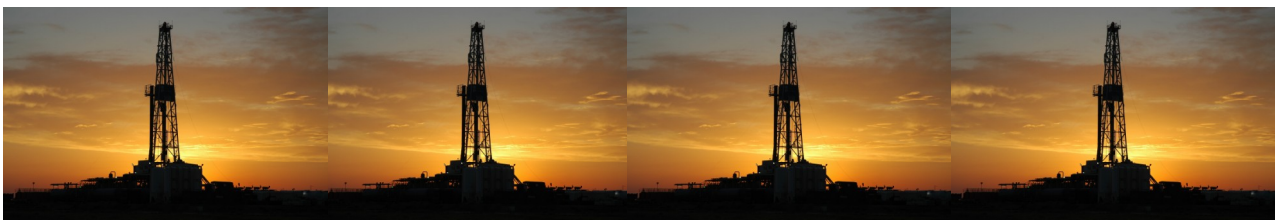
7). VAL Energy, Inc., Wichita (KS), has successfully completed the #1-4 Kough - Mattson Unit in Thomas County as a new pool discovery with oil recovered from the Cherokee (Johnson Zone) and Marmaton (Altamont B) formations. The new Levant oil field is located in the SW/4 of section 4 - T8s- R35W, over two miles from closest known reserves in the multi-pay Schroeder Field (1980). Operator drilled the well to a total depth of 4,870 ft. Completion details are confidential. Field area lies about 15 miles northeast of the town of Brewster, Kansas. (API 15-193-20981)

8). Slawson Exploration Company, Inc., Oklahoma City (OK), has discovered new Marmaton (Pawnee) oil reserves at the #1-26 Faber, spotted in the SE/4 of section 26- T5s- R36W in Rawlins County. The Faber pool discovery was made over three miles southwest of established Mirage Field (2015) where the Lansing-Kansas City and Cherokee formations are producing oil. Completion details are confidential. WW Drilling tools were used to bottom the well at a total depth of 4,680 ft. Field are is located 13 miles south and 2 miles east of McDonald, Kansas. (API 15-153-21180)

9). Funk Petroleum LLC, Eudora (KS), has completed a remote wildcat well in Thomas County where oil is being produced from the Cherokee Limestone. New discovery was made at the #1-18 Calliham Trust in the NW/4 of section 18- T09s- R35W, about eight miles southeast of the town of Brewster. Operator drilled the well to a total depth of 4,900 ft. No completion details are available. The new reserves lie nearly three miles from the Haghoff Field (20214) which produces crude from the Lansing - Kansas City and Cherokee formations. The new oil field has been named Calliham. (API 15-193-2075)

10). RJM Company, Inc., Claflin (KS), reports the discovery of new oil reserves at the #1 Fury Farms spotted in the NW/4 of section 13- T19s- R13W in Barton County. The new Koopman North pool opener found oil deposits in the Lansing - Kansas City and Arbuckle formations with total depth reaching 3,490 ft. Production details are confidential at this time. Drill site is located about two miles northeast of the city of Great Bend, Kansas. (API 15-009-26153)

11). Cobalt Energy LLC, Wichita (KS), has discovered new oil reserves at the #1-32 Binns A in the SW/4 of section 32- T15s- R33W in Logan County. The new Binns pool discovery is producing 75 bbls of oil and 10 bbls of water per day from perforations in the Upper Marmaton and Altamont formations from 4,371 to 4,390 ft. Total depth is 4,800 ft in the Mississippian. Drill site lies nearly three miles from the Touchstone Field (2012) where the Marmaton , Cherokee and Morrow formations have all produced oil. Field area is situated about 16 miles southeast of Russell Springs, Kansas. (API 15-109-21454)



Kansas Geological Foundation Memorials

KGS Member	Date Deceased	Memorial Est.	KGS Member	Date Deceased	Memorial Est.
Dan Bowles	09/89	1990	Claud Sheats	02/02	2002
John Brewer	10/89	1990	Merle Britting	2002	2002
George Bruce	08/89	1990	Harold Trapp	11/02	2002
Robert Gebhart	01/90	1990	Donald M. Brown	11/02	2003
Ray Anderson, Jr.	11/90	1990	Elwyn Nagel	03/03	2003
Harold McNeil	03/91	1991	Robert Noll	09/03	2003
Millard W. Smith	08/91	1991	Benny Singleton	09/03	2003
Clinton Engstrand	09/91	1991	Jay Dirks	2003	2003
M.F. "Ted" Bear	10/91	1991	J. Mark Richardson	02/04	2004
James & Kathryn Gould	11/91	1991	John "Jack" Barwick	02/01	2004
E. Gail Carpenter	06/91	1993	Richard Roby	03/04	2004
Benton Brooks	09/92	1992	Ruth Bell Steinberg	2004	2004
Robert C. Armstrong	01/93	1993	Gordon Keen	03/04	2004
Nancy Lorenz	02/93	1993	Lloyd Tarrant	05/04	2004
Norman R. Stewart	07/93	1993	Robert J. "Rob" Dietterich	08/96	2004
Robert W. Watchous	12/93	1993	Mervyn Mace	12/04	2004
J. George Klein	07/94	1994	Donald Hoy Smith	04/05	2005
Harold C.J. Terhune	01/95	1995	Richard M. Foley	06/05	2005
Carl Todd	01/95	1995	Wayne Brinegar	06/05	2005
Don R. Pate	03/95	1995	Charles B. Moore	09/96	2005
R. James Gear	05/95	1995	Jack Heathman	05/06	2006
Vernon Hess	06/95	1995	Charles Kaiser	09/06	2006
E. K. Edmiston	06/95	1995	Rod Sweetman	08/06	2006
Jack Rine	07/95	1995	Karl Becker	10/06	2006
Lee Cornell	08/95	1995	Frank Hamlin	10/06	2006
John Graves	10/95	1995	Marvin Douglas	12/06	2006
Wilson Rains	10/95	1995	Robert W. Hammond	04/07	2007
Heber Beardmore, Jr.	09/96	1996	Eldon Frazey	04/07	2007
Elmer "Lucky" Opfer	12/96	1996	Pete Amstutz	05/07	2007
Raymond M. Goodin	01/97	1997	Charles Spradlin	05/07	2007
Donald F. Moore	10/92	1997	Donald R. "Bob" Douglass	09/07	2007
Gerald J. Kathol	03/97	1997	Vincent Hiebsch	11/07	2007
James D. Davies	08/88	1997	Glen C. Thrasher	03/08	2008
R. Kenneth Smith	04/97	1997	Peg Walters	06/08	2008
Robert L. Dilts	05/97	1997	Theodore "Ted" Sandberg	07/08	2008
Delmer L. Powers	06/72	1997	James Ralstin	11/08	2008
Gene Falkowski	11/97	1997	Earl Brandt	04/09	2009
Arthur (Bill) Jacques	01/98	1998	Walter DeLozier	05/09	2009
Bus Woods	01/98	1998	Don D. Strong	01/10	2010
Frank M. Brooks	03/98	1998	John Stone	02/10	2010
Robert F. Walters	04/98	1998	Craig Caulk	03/10	2010
Stephen Powell	04/98	1998	Joseph E. Moreland, Jr.	03/10	2010
Deane Jirrels	05/98	1998	Gene Garmon	03/10	2010
William G. Iversen	07/98	1998	James F. Dilts	05/10	2010
Ann E. Watchous	08/98	1998	Jerry Pike	05/10	2010
W.R. "Bill" Murfin	09/98	1998	Donald Hollar	06/10	2010
Donald L. Hellar	11/98	1998	Delbert Costa	08/10	2010
Joseph E. Rakaskas	01/99	1999	John Tanner	08/10	2010
Charles W. Steincamp	02/99	1999	William (Bill) Owen	09/10	2010
Robert and Betty Glover	10/96	1998	Harold (Hal) Brown	10/10	2010
Howard E. Schwerdtfeger	11/98	1999	Edmund G. Lorenz	11/10	2010
W. W. "Brick" Wakefield	03/99	1999	Thomas E. Black	05/11	2011
V. Richard Hoover	01/00	2000	Wayne E. Walcher	07/11	2011
Warren E. Tomlinson	01/00	2000	Henry F. Filson	07/11	2011
James A. Morris	01/00	2000	Thomas Ray	07/11	2011
Eric H. Jager	03/00	2000	Edgar E. Smith	09/11	2012
Kenneth W. Johnson	03/00	2000	Marilyn Messenger	06/13	2013
Dean C. Schaake	03/00	2000	Micheal Mitchell	09/13	2013
Fred S. Lillibridge	05/00	2000	Orvie Howell	11/13	2013
Jerry A. Langrehr	07/00	2000	James Thompson	11/13	2013
Clark A. Roach	07/00	2000	Dick Rowland	09/13	2014
Floyd W. "Bud" Mallonee	10/00	2000	Robbie Thompson	12/13	2014
Ralph W. Ruuwe	09/00	2000	Kris Kennedy	04/14	2015
Robert L. Slamal	02/01	2001	Annette Hedke	02/15	2015
Jerold E. Jespersen	06/01	2001	James Devlin	04/15	2015
William A. Sladek	06/01	2001	Robert Gensch	09/15	2015
Harlan B. Dixon	06/01	2001	Jerald Rains	05/16	2016
Edward B. Donnelly	08/01	2001	Max Houston	05/16	2016
Richard P. Nixon	02/02	2002			
Robert W. Frensley	12/01	2002			
Gerald W. Zorger	01/02	2002			
Don L. Calvin	03/02	2002			

Robert F. Walters Digital Library

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To Join: call 316-265-8676

The screenshot displays the Robert F. Walters Digital Geological Library website. At the top, there are navigation tabs: Search Wells, My Transactions, My Profile, My Account, KGS Home, and FAQ. Below these are search filters for Section, API Number, County, Operator, Lease Name, Depth, Well No., and Spot. A table of well data is visible, listing well numbers, locations, and completion dates. A preview window shows a well log for well 10-315-16W, including a completion card, a log diagram, and a detailed log table with columns for depth, lithology, and logs. The log table includes data for tops, laminations, and various logs like gamma ray and resistivity.

API No.	County	Sec	Twp	Rge	Operator	Lease Name	Well No.	Spot	Location	N S	E W	Spud	Completion	Depth	ELB	ELF	EL GL	Status
15-03-0002	COMANCHE	06	31S	15W	GULF OIL / SINGULAR OIL / CARTER OIL	GALLUP-ROBBINS	1	...	SP 03	3300 FSL	1980 FSL	10/17/1967	10/17/1967	5100	2004			
15-03-0051	COMANCHE	36	31S	15W	NESSMAN-SHEDDART OIL CO	SCHLETTE EST B	1	...	02 08	680 FSL	1320 FSL	12/29/1960	12/29/1960	4990	2001			
15-03-0084	COMANCHE	15	31S	15W	F. J. JOHNSON	ROBBINS	1	...	00 08	2310 FSL	2310 FSL	12/01/1964	12/01/1964	5005	2002			
15-03-0069	COMANCHE	23	31S	15W	BARBARA OIL CO	ROBBINS UNIT	1	...	08	1200 FSL	1200 FSL	06/26/1963	06/26/1963	4960	2002			
15-03-0066	COMANCHE	23	31S	15W	BARBARA OIL CO	ROBBINS B	1	...	08	1200 FSL	1200 FSL	07/07/1963	07/07/1963	5460	2042			
15-03-0064	COMANCHE	23	31S	15W	BARBARA OIL CO	ROBBINS	1	...	08	4200 FSL	2100 FSL	02/27/1963	02/27/1963	4930	2004			
15-03-00113	COMANCHE	36	31S	15W	INTER-SEA SERVICE	SHAW												
15-03-10001	COMANCHE	14	31S	15W	BARBARA OIL CO													
15-03-10002	COMANCHE	10	31S	15W	BARBARA OIL CO													

CHANGE SERVICE REQUESTED

KGS BULLETIN
 March-April 2017

March 2017

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

April 2017

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