



KANSAS GEOLOGICAL SOCIETY

# BULLETIN

Volume 94 Number 4

July - August 2019

Established 1925

## IN THIS ISSUE

### **Arkoma Basin | Delivering Value per Horizontal Foot**

By Kyle Stephenson, PetroBase

page 14-16

### **KGS Events:**

2nd Annual KGS Brewery Meet - August 16th at Aero Plains Brewery

page 4

35th Annual KGS Fishing Tournament - September 13, 2019

page 11

Annual KGS Golf Tournament - September 23, 2019

page 18



c. David F. Coppedge





# THE TOTAL PACKAGE

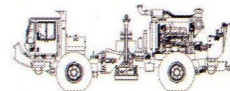
www.dawson3d.com



MIDLAND 432-684-3000 | HOUSTON 713-917-6772  
OKLAHOMA CITY 405-848-7512 | DENVER 303-723-0440  
PLANO 972-881-1099 | CALGARY 403-263-7770

## Use Your KGS Library For All Your Printing Needs

Old photos?  
Old documents?  
We can scan them for you!



**Proudly Celebrating 25+ Years**  
**Acquiring Seismic Data Throughout the**  
**Continental United States**

### WICHITA

Nicolle Jausel  
(316) 636-5552  
Nicolle@paragongeo.com

### DENVER

Kim Nordberg  
(303) 888-8885  
Knordberg@paragongeo.com

### HOUSTON

Brent Propst  
(832) 643-5158  
Bpropst@paragongeo.com

### OKLAHOMA CITY

Joe Broussard  
(405) 213-9859  
Jbroussard@paragongeo.com

website: [www.paragongeo.com](http://www.paragongeo.com)

## Robert F. Walters Digital Library

The most complete source for Kansas data

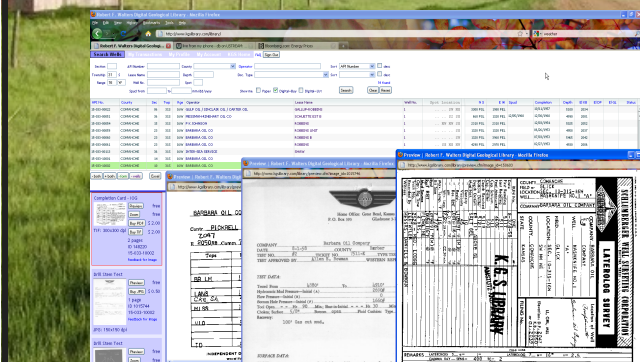
Database updated nightly

Day or Night

You can get to the data as you need it

[www.kgslibrary.com](http://www.kgslibrary.com)

To Join: call 316-265-8676



## 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*

# Table of Contents

---

## Features

### Arkoma Basin | Delivering Value per Horizontal Foot

By Kyle Stephenson, PetroBase

page 14

## KGS Events:

2nd Annual KGS Brewery Meet - August 23rd at Aero Plains Brewery

page 4

35th Annual KGS Fishing Tournament - September 13, 2019

page 11

Annual KGS Golf Tournament - September 23, 2019

page 18

## Departments & Columns:

KGS Tech Talks	4
President's Letter	7
Advertiser's Directory	8
Professional Directory	19
Kansas Geological Foundation Cornerstone and KGF News	24 & 25
Kansas Geological Foundation Memorials	26-28
Exploration Highlights	30

## ON THE COVER:

The White Pocket area in Arizona has a really awesome geology – forget the usual horizontal layers, here we see swirls, folds, faults, offsets, all filled out with the craziest colors you could imagine. Understanding what's happening here and the complex processes that gave birth to these fantastic shapes makes it all even more beautiful.

Taken from *"17 pictures that will make you want to become a geologist"* web page.  
Photo credit to David F. Coppedge

## 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](mailto: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

Technical talks will restart in September



**2nd Annual KGS Brewery Meet**  
**Friday August 16, 2019**  
**At Aero Plains Brewing**  
**117 N. Handley St., Wichita, KS**  
**In the Delano District**

Please join friends and colleagues for a few hours of socializing and networking

Please remember to check the website for the most up to date information on Technical Talks  
<http://www.kgslibrary.com/techtalks.cfm>

*Tech Talks are held at Landmark Square*  
*212 N. Market—4th floor*  
*In the Wisdom Center*



*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.*



# KANSAS GEOLOGICAL SOCIETY



## BOARD OF DIRECTORS

### PRESIDENT

Wesley Hansen

### PRESIDENT-ELECT

Tim Lauer

### SECRETARY

Robert Stolzle

### TREASURER

Aaron Young

### DIRECTORS

Beth Isern

Ryan Dixon

Doug Davis

### ADVISORS

Rocky Milford

Kent Crisler

## COMMITTEE CHAIRMEN

### Advertising

Kent Scribner

### Advisory

Rocky Milford

Kent Crisler

### Annual Banquet

Doug Davis

### Bulletin

Wesley Hansen

### Continuing Education

### Distinguished Awards

Beth Isern

### Environmental

Kent Matson

### Field Trip

Jerry Honas

### Fishing Tournament

Randy Teter

### Future Plans

Toby Eck

### Golf

Rob Patton

### Historian

Larry Skelton

### Library

Ted Jochems

### Membership

Larry Friend

### Nomenclature

John H. Morrison, III

### Picnic

Beth Isern

### Public Relations

### Shooting Tournament

Larry Richardson

### Technical Programs

Doug Davis

### Technical Committee

Ryan Dixon

### Finance Committee

Tim Hellman, Chairman

Members: Rocky Milford, Chuck Brewer, David Doyel, and Tom Funk

## A.A.P.G. DELEGATES

Douglas Davis  
2021

Wesley Hansen  
2021

## BULLETIN STAFF

### EDITOR

Wes Hansen (316) 772-6188

### ADVERTISING

Kent Scribner  
Stelbar Oil Corp. (316) 264-8378

### PROFILES/MEMORIALS

Robert Cowdery

### EXPLORATION HIGHLIGHTS

John H. Morrison, III  
Independent O&G (316) 263-8281

### STATE SURVEY

KS Geological Survey (785) 864-3965

### SOCIETY NEWS

KGS Library (316) 265-8676

### MANAGER

Wes Hansen (part time) (316) 265-8676

### EDITORS EMERITUS

Wes Hansen (316) 772-6188

Larry Richardson (316) 262-8427

## K.G.S. LIBRARY

PHONE 316-265-8676 FAX 316-265-1013

email: [frontdesk@kgslibrary.com](mailto:frontdesk@kgslibrary.com) or

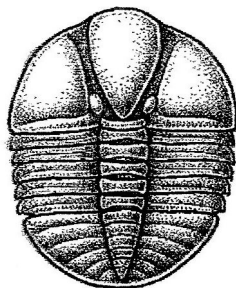
Web: [www.kgslibrary.com](http://www.kgslibrary.com)

The KGS *Bulletin* is published bi-monthly by the Kansas Geological Society, with offices at 212 North Market, Wichita, Kansas 67202 Copyright 2019, The Kansas Geological Society. The purpose of the *Bulletin* is to keep members informed of the activities of the Society and to encourage the exchange and dissemination of technical information related to the Geological profession. Subscription to the *Bulletin* is by membership in the Kansas Geological Society. Limited permission is hereby given by the KGS to photocopy any material appearing in the KGS *BULLETIN* for the non-commercial purpose of scientific or educational advancement. The KGS, a scientific society, neither adopts nor supports positions of advocacy, we provide this and other forums for the presentation of diverse opinions and positions. Opinions presented in these publications do not reflect official positions of the Society.



Twenty-two Trucks Serving  
Kansas—Colorado—Texas—Nebraska—Illinois

DST's  
Back Pressure testing (G1 & G2)  
Slick line services using the same Weatherford  
Electronic Pressure Gauges used on DST's



1-800-728-5369

FAX 1-785-625-5620

www.trilobitetesting.com  
trilobite@eaglecom.net

SHOPS LOCATED IN:

Hays, KS  
Scott City, KS  
Pratt, KS  
Hugoton, KS  
Oberlin, KS  
Clay City, IL

## CAN YOU NAME THE CRITTER?

Sponsored by Trilobite Testing, Inc.

Is your paleo up to date?

If you know the name of the trilobite,  
submit your guess via e-mail to  
manager@kgslibrary.com

Remember that *Trilobite Testing* is  
sponsoring your efforts, so be sure to thank  
Paul Simpson the next time you see him.

### CONGRATULATIONS!!

**Randy Lilak correctly identified  
The last one as: Harpides**

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



### ***Kansas Geological Society (KGS) Medallion for Scientific Distinction and Excellence***

The Kansas Geological Society (KGS) Medallion for Scientific Distinction and Excellence may be given annually for peer-recognized, sustained significant scientific contributions to all facets of applied Kansas geology, including work either in Kansas or in surrounding states if the latter contributions pertain directly and significantly to Kansas geology. No more than one award may be given each year, an award does not have to be given every year, and members of the KGS Awards Committee that handle nominations for this award cannot nominate themselves for this award. The candidates need not be active KGS members, and they must be living at the time of selection. The primary consideration in the selection of a candidate shall be his or her sustained, published, significant contributions to any facet of Kansas geology. Contributions may be varied in form such as development of geologic concepts, advancement in discovery thinking, and recognized leadership in exploration concepts. Oral and/or written publications in peer-reviewed geological venues is a requisite criterion for any candidate for this award. The name of a candidate shall be presented by the Awards Committee to the KGS Board of Directors for their approval. Once approved, the recipient shall be presented an appropriate award in the form of a medallion or plaque recommended by the Awards Committee and approved by the Board of Directors at the annual business meeting of the society. This is a new award given by the KGS for distinction and achievement in Geological research in Kansas.

Awards Committee members are Sal Mazzullo, Mike Dealy and Alfred James.

# President's Letter

Dear KGS members and friends,

Summer is in full swing now, as our Kansas monsoon period comes to an end. Heavy rains across the state of Kansas put operators, contractors and service companies in a real bind trying to get wells drilled. Delays of two to three weeks waiting for locations to dry out were common.

There are no technical talks through the summer, but they will restart again in September. Many thanks to our program chair, Doug Davis, for his continuing efforts to get speakers for our society. My good friend from Colorado, Mike Bair, emailed me awhile back asking if it would not be possible to live stream our technical talks or post them to YouTube. I have asked that technical members of the board look into this possibility. There may be some hurdles to overcome in regard to speakers not wanting their talks recorded, but will shall see. Doing this in some fashion would allow out of town members to get pdhs for their Kansas certification.

I am glad to announce that Madison Moore, our latest staff member at the KGS, has agreed to go full time effective June 1. She has proven to be a significant help to both Rhonda and Angela in their jobs. She has been cross training on various aspects of Rhonda and Angela's positions here at the KGS.

Prior to our society's hosting of the AAPG Mid-Continent Section meeting in October, our society has three events in August and September. On Friday, August 16, 2019, Beth Isern has set up our second annual KGS Brewery Meet at Aero Plains Brewery from 5:00-8:30 PM in Wichita's Delano District. Last year we had about 70 members and friends get together at the inaugural event. By all accounts it was well received. I encourage everyone to attend this year to network with other geologists, geophysicists, and engineers. Details are in this issue of the bulletin. A mass email will also go out in a few weeks.

On September 13, 2019, the 35th Annual KGS Fishing Tournament will be held at El Dorado Lake in Butler County, Kansas. Randy Teter and Jon Christensen are the co-chairs of the event. Details for this event are in the bulletin. Lastly, Rob Patton, has set up our golf tournament for Monday, September 23, 2019 at Terradyne Country Club. This year he plans to have 4 man teams (select your own team) in a best ball scramble format. Details are in the bulletin.

I am also reminding our AAPG members as well as any other geologists to please attend the AAPG Mid-Continent Section meeting from October 5-8. Information is also in this issue of the Bulletin on page 13. Short courses, technical presentations and a field trip to look at Mississippian outcrops related to the SCOOP and STACK plays in Oklahoma are on the agenda. I hope to see many of you at these various events.

Sincerely,

Wes





## AAPG Section Meeting Updates

September 2019	Rocky Mountain September 15-18 Cheyenne, WY
October 2019	Mid-Continent October 5-8 Wichita, KS
	Eastern October 12-16 Columbus, OH
	Gulf Coast October 23-25 Houston, TX

Log in to  
Walters Digital Library  
At  
[www.kgslibrary.com](http://www.kgslibrary.com)

Log in as our guest  
and see the Society's Database  
A convenient way to see what  
you might want to order!  
Call or email your order to:  
316-265-8676  
[frontdesk@kgslibrary.com](mailto:frontdesk@kgslibrary.com)

## ADVERTISER'S DIRECTORY

	<i>page</i>
Dawson Geophysical Company	2
Duke Drilling	29
Kansas Geological Foundation	19
Lockhart Geophysical	29
Murfin Drilling Company, Inc	29
PARAGON Geophysical Services, Inc	2
PetroBase Explorer	10
Professional Directory	21
Trilobite Testing	6
Walters Digital Library	2, 17

## ADVERTISER'S RATES: 2019

Full Page	B&W	Color
6 issues	\$2,000	\$2,500
3 issues	\$1,080	\$1,325
1 issue	\$480	\$525
<b>1/2 Page</b>		
6 issues	\$1,000	\$1,500
3 issues	\$540	\$825
1 issue	\$225	\$350
<b>1/4 Page</b>		
6 issues	\$600	\$900
3 issues	\$325	\$525
1 issue	\$150	\$250
<b>1/8 Page</b>		
6 issues	\$300	\$500
3 issues	\$175	\$325
1 issue	\$75	\$185
<b>Professional Ad (Business Card)</b>		
6 issues	\$90	\$180

For one-time ads, call Kent Scribner at 316-264-8378

**ANNOUNCEMENT  
KANSAS GEOLOGICAL FOUNDATION**

Per a Notice that was distributed to owners of seismic data that has been stored under the auspices of the Kansas Seismic Exchange (KSE), circumstances have occurred such that the storage of those contents have had to be removed from that library, as of December 31, 2018.

In the interest of preservation of the unique data, gathered over many decades, and which has inherent value, the Kansas Geological Foundation (KGF) became involved in a process to assist in the transfer of the data out of KSE facilities. As of December 31, 2018, the KSE relocated all seismic data in their library to the Wichita facility of Underground Vaults and Storage (UVS), located at 707 E. 33rd St. North, Wichita, KS 67219.

The owners of the data had the option, via Notice, to either recover their records/data, or make a tax deductible contribution related to that data to the KGF. If, at the end of a two year period ending December 31, 2020, data is not claimed by respective owners, it will automatically be transferred as to ownership from the owners of the KSE to the KGF.

The KSE has agreed to release index files, plat maps, and other reference items that relate to the stored data to the KGF. The KGF plans to relocate these reference files to a facility within the Kansas Geological Society and Library (KGS). Library members will be able to access these files and, for fees yet to be determined, obtain copies of plats, etc, such that if they wish to access actual data at the UVS facility, that can be accomplished by individuals who have access codes, which will be controlled by UVS and the KGF.

Various elements related to these processes are still being worked out, and the KGF will provide updates in the near future as to additional details. For those members of the KGF who have supported its efforts such as the major accomplishments related to the development of the Walters Digital library and the ongoing integration project, the KGF Board wishes to express deep gratitude. We will also closely monitor progress of this new undertaking and carefully evaluate cost/benefit of it into the future. Should it become infeasible to continue, we will exercise options to discontinue our involvement with the activity.

---

---

## **Robert F. Walters Digital Library**

**Log in as our Guest**

**username: guest**

**password: guest**

**316-265-8676**



**Let Us Print Your Geo Reports  
And Save Your Time For Finding More Oil & Gas**

**Top Quality Color Printing For Our Membership**

**Email your files to: [kgsorders@gmail.com](mailto:kgsorders@gmail.com)**

# PetroBase | Explorer

## Search. Map. Analyze.

**Explorer** integrates Production & Well Data with greater clarity and ease!

**Advanced Google Mapping**  
**Sophisticated Production Plots**  
**Decline Curve Analysis**  
**Normalized Type Curves**  
**Well Completions & Intents**  
**Personalized Areas of Interest**

A valuable tool for anyone in the Oil & Gas Industry including  
Geologist, Engineers, Investors, Office and Field personnel.

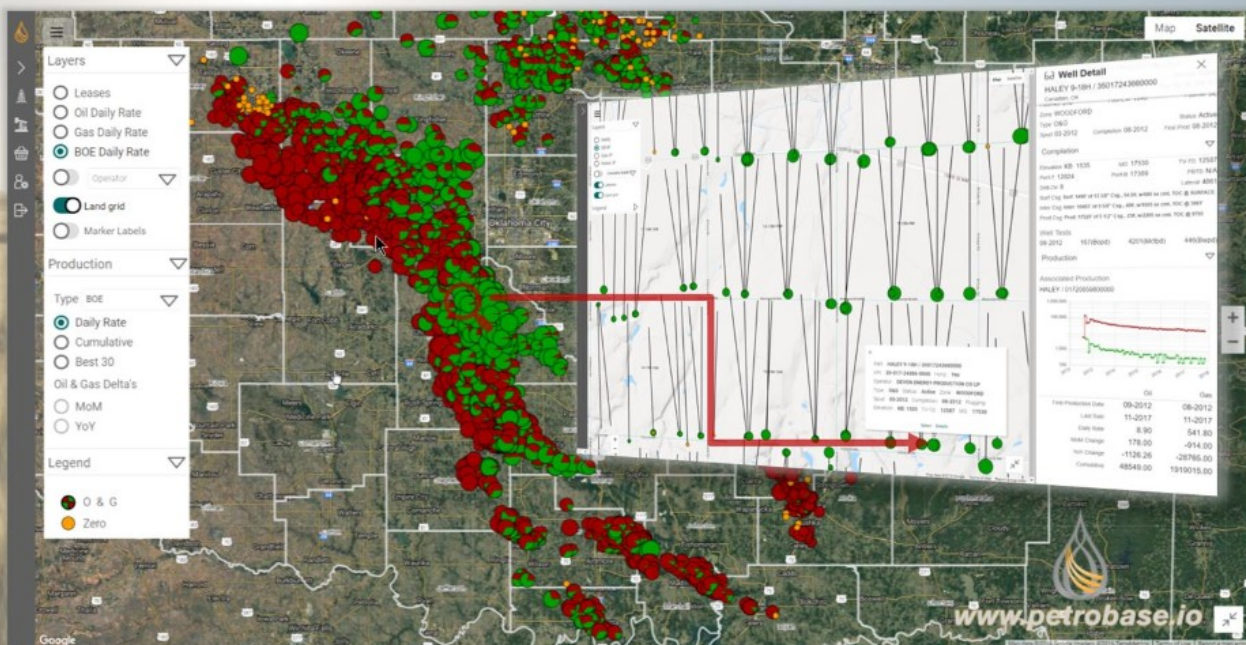
For more information visit

[www.petrobase.io/explorer](http://www.petrobase.io/explorer)

**TRY IT FOR FREE**

[www.petrobase-explorer.net/signup](http://www.petrobase-explorer.net/signup)

### The Ultimate Data Mining & Analysis Tool For Production & Well Data



Kyle@PetroBase.net | 316.755.6850 ~ For additional information contact ~ James@PetroBase.net | 316.204.7413



# 35th Annual KGS Fishing Tournament

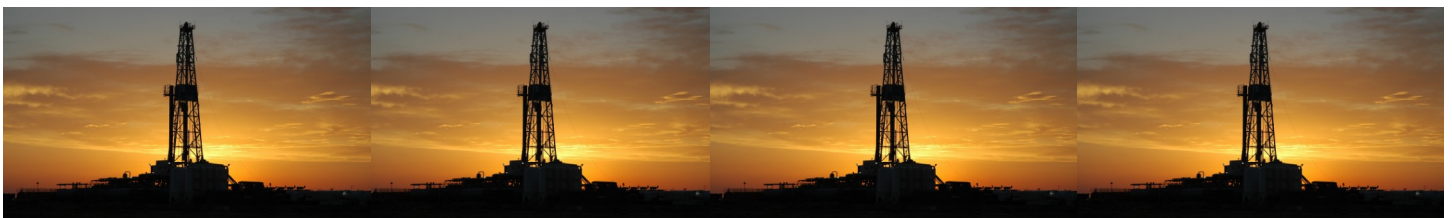
**El Dorado Reservoir  
Friday, September 13, 2019**

**Check in: 7:30 AM @ Shady Creek Marina**

**A Late Lunch Will be Served at 3:00 PM  
Beer, sodas, and water will also be provided**

**Entry Fee is \$10.00 for KGS members and sponsors  
All others are \$20.00**

**Please see the enclosed flyer to sign up.  
Forms also available at the front desk of the KGS Library**



# An Open Invitation to Young Geologists to Join AAPG

I would like to extend a special invitation to recent graduates and other young geological professionals to join AAPG. There are many young geologists outside the Wichita area that I have never met. They may work out of Great Bend or Hays, Kansas working with smaller oil and gas producers or working on their own as well site geologists. Kansas does have a future for at least a few more years for exploration and development. I'm not sure, however, if it extends much more than another 10 years or so. The time is now to meet others from larger regional companies to forge a relationship for future employment. Young minds will be needed to replace those retiring and that other bad option.

I joined AAPG late in my career, much to my regret. I now serve voluntarily as a delegate for the Mid-Continent Section representing the Kansas Geological Society. Please come to our meeting this Fall. Go on the field trip or take a short course to expand your knowledge. One might be fortunate enough to find me in a buying mood for an adult beverage one of those convention evenings. I cannot stress enough that you do have a need to expand your contact base.

Respectfully yours,

Wesley D. Hansen  
Bulletin Editor and 2019 KGS President

## Financial Support for the Mid-Continent Section Meeting

Every six years the Kansas Geological Society hosts the AAPG Mid-Continent Section Convention. It will be held at the DoubleTree by Hilton October 3-8, 2019. The convention will have between 500 and 700 geologists, geophysists, and petroleum engineers attending from across the entire country. Also there will be both local and national companies exhibiting.

The Finance Committee respectfully requests both company and individual financial support. Please contact us at your convenience with any questions that you may have.

Respectfully submitted,

Douglas Davis, Finance Chair  
James Beilman Finance Co-Chair

doug5696@gmail.com  
jbeilman@mulldrilling.com

316-641-4469  
316-264-6366

# 2019 AAPG Mid-Continent Section Meeting

## October 5-8, DoubleTree by Hilton, Wichita, KS

### Hosted by the Kansas Geological Society

General Chair: Toby Eck, KGS President: Wes Hansen

For general inquiries, advertising, or donations,  
contact Toby Eck (316) 305-0572, [toby@shakespeare-oil.com](mailto:toby@shakespeare-oil.com)  
or Doug Davis (316) 641-4469, [doug5696@gmail.com](mailto:doug5696@gmail.com)

#### October 3-4 Field Trip

Meramecian-Chesterian strata of Oklahoma in outcrop and core  
Led by Dr. Cory Godwin and Dr. James Puckette, OSU

#### October 5-6 Short Courses

Seismic Attributes, led by Dr. Kurt Marfurt (Full-Day)  
Geochemistry, led by Dr. Wahid Rahman (Full-Day)  
Machine Learning in Oil and Gas, with several presenters (Full-Day)  
Digital Borehole Geology, led by Dr. John Doveton (1/2-Day)

#### October 6 Opening Ceremonies and Icebreaker

#### October 7 Technical Sessions Begin All-Convention Luncheon

Cretaceous Revenant in Arctic Alaska - Giant Oil Accumulations Hidden in Plain Sight  
Dr. David Houseknecht, USGS  
YP/Student and Mentor 'Meet and Greet'

#### October 8 Technical Sessions Continue Division of Professional Affairs Luncheon Interactive Ethics Presentation, John Jordan

---

### Sponsors and Exhibitors

**Booths:** \$800, includes 2 complimentary registrations and an 8'x10' booth from Sunday afternoon until Tuesday afternoon (October 6-8)

**Sponsors:** \$100-499 (Recognized in Convention Program)  
Bronze: \$500-999 (Company Logo in Convention Program)  
Silver: \$1,000-2,499  
Gold: \$2,500-4,999 (Advertising Space on Convention Website and App)  
Platinum: \$5,000-9,999  
Diamond: \$10,000+

<b>Program advertising:</b>	Full-page color advertisement	\$2,500
	Full-page B&W advertisement	\$1,500
	½ page B&W	\$800
	¼ page B&W	\$400
	Business Card	\$100



# Arkoma Basin | Delivering Value per Horizontal Foot

Kyle Stephenson, PetroBase

Horizontal well development in Hughes County, located in the Arkoma Basin, primarily targets the Woodford Shale. This basin predominantly produces gas, but oil does come into play in western Hughes. Due to oil's lack of significant value, oil's contribution will be ignored in this review. Provided below is a Woodford Shale initial potential BOE bubble map which gives context of Arkoma Woodford Shale development in relationship to the STACK & SCOOP plays located west and south of Oklahoma City.

\*Barrel of Oil Equivalent (15mcf per barrel used)

## Oklahoma Woodford Shale Horizontal Well Completions

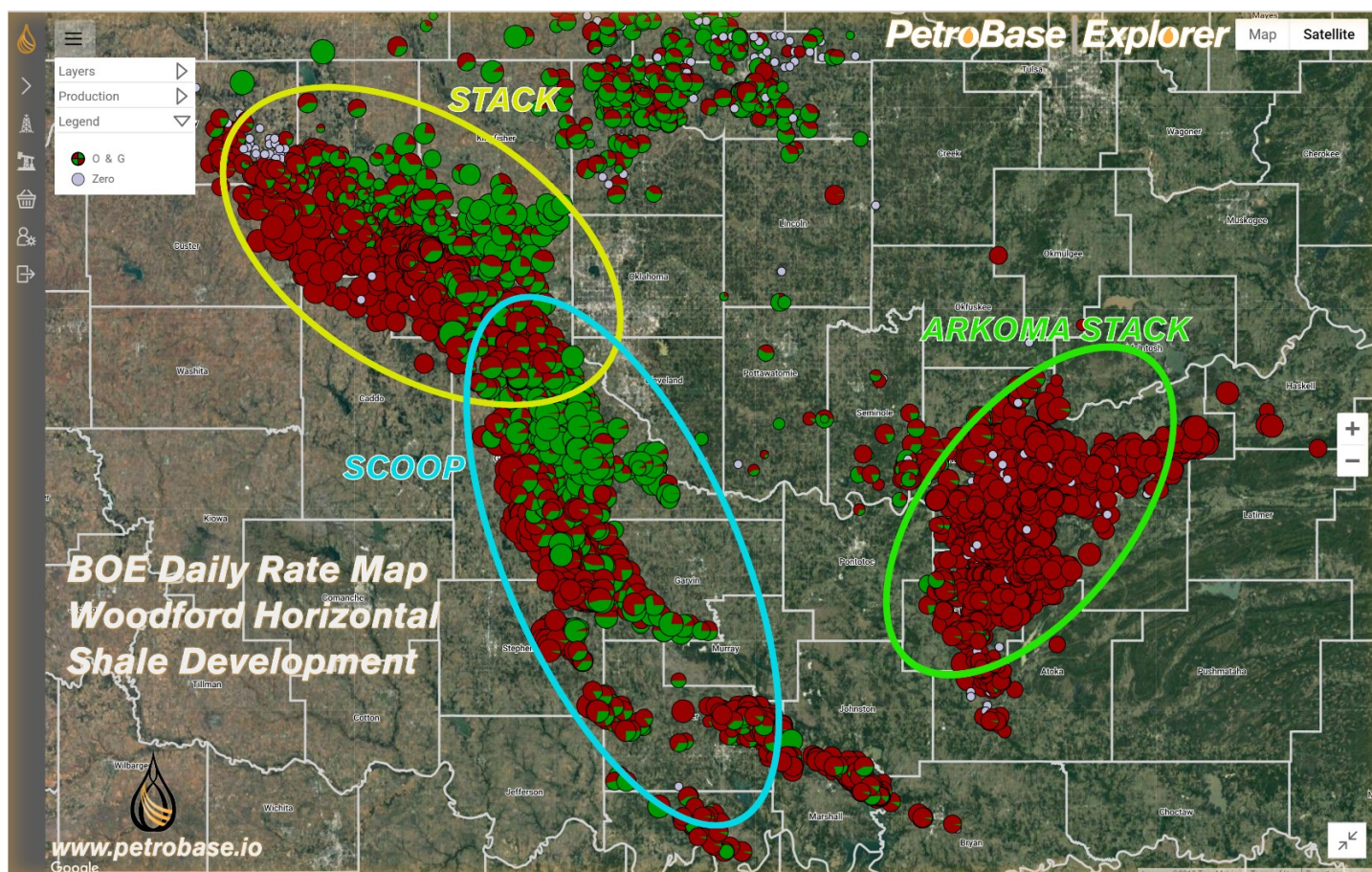


Figure 1. Reported Initial Potential BOEPD bubble map for Woodford Shale horizontal wells (15 MCF/BO used).



## Hughes County Horizontal Crux

Horizontal development in Hughes County began in 2004, peaked in 2008, and has remained active. The current rate bubble map<sup>fig.2</sup> illustrates horizontal activity. Wells completed since March 2016, are highlighted. Early development was clustered in the south and southeast portions. Current development is more central with emphasis along the eastern edge. Hughes County does offer some distinct relative advantages:

- The Woodford Shale is at a shallower depth
- Costs at a shallower depth are less
- Production characteristics are predictable

Trending with the newer completions are longer horizontal laterals which have resulted in higher production volumes. This behavior is also true in a handful of older wells that have above average lateral length. There does appear to be a relationship between lateral length and reported initial potential rates, but the correlation is less predictable.

### Well Study Projects

1. Wells prior to March 2016 with horizontal lengths less than 8,000
2. Wells prior to March 2016 with horizontal lengths greater than 8,000'
3. Horizontal wells completed after March 2016

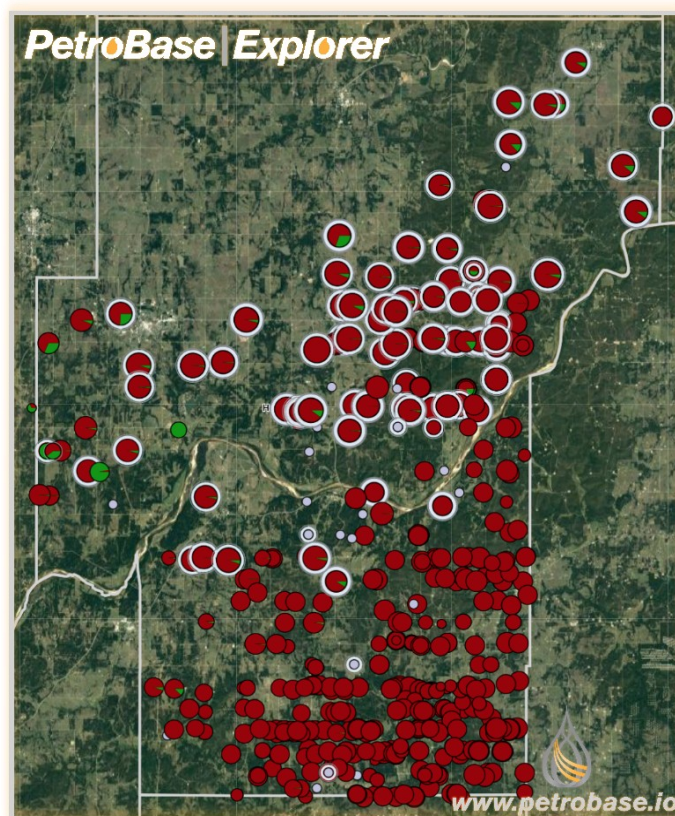


Figure 2. Current Rate BOE Per Day bubble map for Hughes County Woodford Shale Horizontal Wells. Activity since March 2016 is highlighted.

## Delivering Value per Horizontal Foot

Normalized type curves were generated for each project along with a decline curve and economic analysis. A normalized type curve is an average single well production plot for a data set normalized on date and horizontal length when elected.

What stands out for these projects is the relationship between lateral length to peak production rates, first year production volumes, and ultimate reserves. *Higher production volumes are associated with longer lateral lengths.* Decline curve parameters for the three projects are similar. These similar characteristics yield greater reserves at longer lateral lengths.

Worth noting is the improved total well cost for project 3, which is the result of a more competitive pricing environment for drilling and completions. The median cost for projects 1 & 2, from 2009 and 2010, equal \$1,098/lateral foot and \$1,093/lateral foot respectively. The more recent wells in project 3 have a median cost of \$425/lateral foot. This significant drilling and completion cost savings yield improved cash flow and rate of return values.

# Project Normalized Type Curves & Decline Analysis



Figure3. Type curve, decline curves and economic analysis performed in PetroBase Explorer. Cost data provided by Oseberg using their Alta technology.

## Summarized Production and Economic Values by Project

Project	Lateral Len (Ft.)	Peak Rate (MCFPM)	Production 1 <sup>st</sup> Year	Median Cost (\$/Lateral Ft)	Reserves (MMCF)	Cash Flow (M\$)	DCFROR (%)
1	3,764	72,880	497,244	1,098	2,984	1,213	4.8
2	9,524	139,088	1,070,628	1,093	7,792	7,017	6.5
3	8,888	114,131	867,624	425	7,677	13,416	31.3



# 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](http://www.kgslibrary.com)

To Join: call 316-265-8676

The screenshot displays the Robert F. Walters Digital Geological Library website. The top navigation bar includes links for Search Wells, My Transactions, My Profile, My Account, KGS Home, and Sign Out. The main content area features a search results table with columns for API No., County, Sec, Top, Age, Operator, Lease Name, Well No., Spot, Location, Completion, Depth, EISB, EISD, EISL, and Status. Below the table, there are several document preview thumbnails, including a Completion Card, a Drill Stem Test, and a Well Log. The well log preview shows detailed data for well K-6-S-15-16N, including completion, casing, and production information.

API No.	County	Sec	Top	Age	Operator	Lease Name	Well No.	Spot	Location	Completion	Depth	EISB	EISD	EISL	Status
15-033-0002	CORANCHO	66	315	SEW	GLAF OIL / SINGULAR OIL / CARTER OIL	GALLUP-ROBBING	1	...	SE 38	3300 FSL	1980 FSL	10/11/2007	5100	2034	
15-033-00051	CORANCHO	36	315	SEW	MESSEMAN-42NDHART OIL CO	SCHMETTE EST B	1	...	SE 28	660 FSL	1320 FSL	12/06/2000	4910	2001	
15-033-00054	CORANCHO	15	315	SEW	P K JOHNSON	ROBBING	1	...	SE 38	2310 FSL	2310 FSL	12/01/2004	5025	2052	
15-033-00059	CORANCHO	23	315	SEW	BARBARA OIL CO	ROBBING LHET	1	...	SE 38	1320 FSL	1320 FSL	07/01/2003	4981	2017	
15-033-00060	CORANCHO	23	315	SEW	BARBARA OIL CO	ROBBING B	1	...	SE 38	1320 FSL	1320 FSL	07/01/2003	5465	2042	
15-033-00061	CORANCHO	23	315	SEW	BARBARA OIL CO	ROBBING	1	...	SE 38	1320 FSL	1320 FSL	07/01/2003	5465	2042	
15-033-00113	CORANCHO	36	315	SEW	INTER-SEA SERVICE	SHAW	1	...	SE 38	4090 FSL	2670 FSL	02/07/2003	4810	2006	
15-033-00061	CORANCHO	36	315	SEW	INTER-SEA SERVICE	SHAW	1	...	SE 38	4090 FSL	2670 FSL	02/07/2003	4810	2006	
15-033-00062	CORANCHO	10	315	SEW	BARBARA OIL CO	SHAW	1	...	SE 38	4090 FSL	2670 FSL	02/07/2003	4810	2006	

---

---

## **SAVE THE DATE**

**Rob Patton, golf committee chairman for 2019, has announced the date for this year's KGS Golf Tourney.**

**Monday, September 23, 2019 at Terradyne CC**



**The tournament will consist of 4 man teams (best ball) in a scramble format. Pick your own teams.**

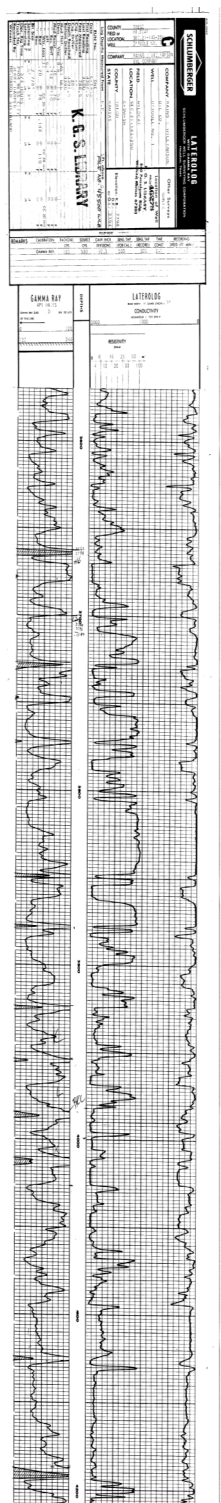
**Limited to 144 players**

**Entry fee is \$100.00 per person payable to the KGS  
Prizes will be awarded to 1st, 2nd, 3rd, and 4th flights.  
Additional prizes for closest to the pin, longest drive and  
longest putt on various holes.**

### **Sponsors Needed**

**Please see the flyer in this issue to sign up.  
Forms will also be available at the front desk in the  
KGS Library**

*The KGS Library is pleased to  
announce a new service*



Creating  
LAS files  
from our logs  
or yours

**\$20.00 per  
curve!!**

Quick  
turn-around

Send us your log file  
or tell us which of  
ours you would like  
converted.

**316-265-8676**

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

**We Invite You  
To join**

***Kansas  
Geological  
Foundation***

*\$50.00 membership is  
tax deductible*

*Call 316-265-8676*

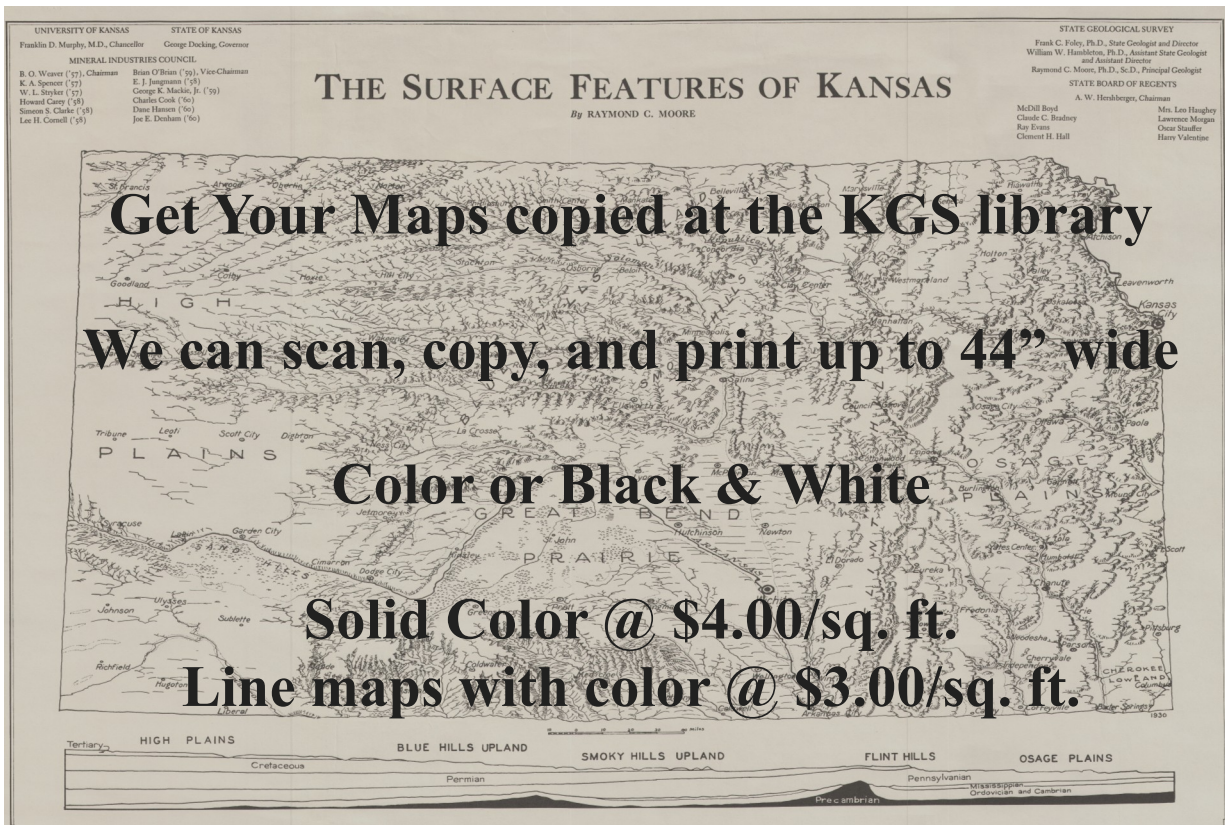
*Or send checks to:  
Kansas Geological Foundation  
212 N. Market, Ste. 100  
Wichita, KS 67202*

#### **BULLETIN CONTENT POLICY**

Effective January 1, 2018, only ads for service companies and geologists offering their services will be permitted in the KGS Bulletin. Furthermore, only content of geologic interest or official KGS functions (technical talks, annual banquet, golf tourney, picnic etc.) will be permitted in this bulletin. This policy is in keeping with maintaining a professional standard for this publication. Any interpretation of this policy rests solely with the editor of this bulletin.







*Your Company*

*1/4 page ad*

*here*

**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**

# PROFESSIONAL DIRECTORY

## Kirk Rundle Consulting Geophysicist

3D Seismic Design, Acquisition to Processing QC.,  
Interpretation and Analysis, Subsurface Integration  
7340 W. 21st. N., Ste. 100  
Wichita, Kansas 67205

Office: 316-721-1421 Fax: 316-721-1843

Email: kirk@rundlegeo.com

## Covey - The Well Watchers *One Thousand Wells and Counting"*

Curtis E. Covey Wellsite Petroleum Geologist

Gas Trailer Cell: 316-217-4679  
Email: wellsitegeol@gmail.com

Office: 316-776-0367  
6548 Bedford Circle  
Derby, Kansas 67037



**GRAVITY OIL**  
LLC

**ELI J. FELTS**  
CONSULTING PETROLEUM GEOLOGIST

316.204.5059 E.J.FELTS47@GMAIL.COM

- VERTICAL & HORIZONTAL WELL-SITE SUPERVISION
- PROSPECT GENERATION & EVALUATION
- WELL-LOG ANALYSIS
- DIGITAL MAPPING SERVICES & GEOLOGICAL REPORTS
- KCC & COMPLIANCE SPECIALIST
- PROFESSIONALLY INSURED

COMPETITIVE PRICING & STATE OF THE ART SERVICES YOU CAN COUNT ON  
CALL TODAY & RECEIVE (1) FREE DAY WELL-SITE TO NEW CLIENTS

## WESLEY D. HANSEN Consulting Geologist

Well site Supervision • Geologic Studies  
212 N. Market, Ste 257  
Wichita, Kansas 67202  
Office/Mobile: (316) 772-6188  
whansen4651@sbcglobal.net  
37 Continuous Years in the Kansas Oil Patch

## Phil Askey, L.G. Wellsite Geologist

913-952-2032  
phil.askey55@gmail.com  
Experienced in:  
Kansas - Colorado - Nebraska

## ROGER L. MARTIN

Independent Petroleum Geologist

200 E 1st St, Ste 405, Wichita, KS 67202

Cell: 316-833-2722 Office: 316-250-6970

KS Field Cell: 316-655-1227

Fax: 316-425-3829

Email: rogermartingeo@yahoo.com

## ALFRED JAMES III Petroleum Geologist

Kansas - Colorado - Utah

P.O. Box 218 Augusta, KS 67010

SIPES # 1111

Office: 316 648-2821

james.alfred21@yahoo.com

## M. ((Brad))ford Rine, Geologist

Licensed, Registered, Certified

PROSPECT EVALUATION  
WELLSITE SUPERVISION  
RESERVOIR STUDIES  
EXPERT TESTIMONY

PROSPECT ORIGINATION  
DRLG/COMPL CONSULTATION  
PROPERTY EVALUATION  
BANJO PICKER

100 South Main  
Suite #415  
Wichita, Kansas 67202

Email: rinemb@sbcglobal.net  
Office & Cell: (316) 250-5941



## DeGood Geological Services

Alan DeGood

Kansas Licensed Geologist #330

1233 Autumn Drive

Goddard, KS 67052

Phone: 620-242-6301

Home: 316-794-8391

Email: degood1@live.com

Prospect Reviews  
Reserve Studies  
Rendition Preparation

## MELLAND ENGINEERING, INC.

Petroleum Engineering & Geological Consulting

James E. Melland, P.E., P.G.

President

Office: (620) 241-4621 Fax: (620) 241-2621

jamesm@mellandengineering.com

www.mellandengineering.com

P.O. Box 841, McPherson, KS 67460

Your business card ad  
Could be right here  
For only \$90/year

Your business card ad  
Could be right here  
For only \$90/year

## 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](http://www.kgfoundation.org)

Call 316-265-8676

Ask for Rhonda or Wes to check out videos

## 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*

### **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.

### **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*

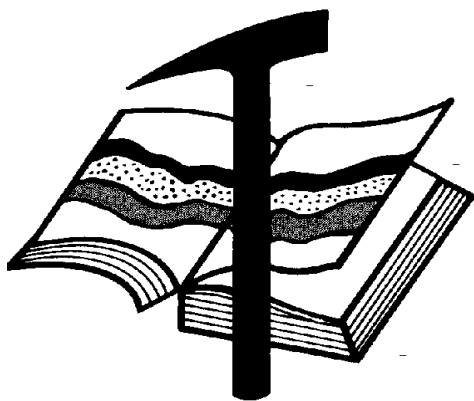
*Microfiche Electric Logs*  
*Kansas*  
*Oklahoma*  
*Texas*

### **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**





# Kansas Geological Foundation

*Web Site: [www.kgfoundation.org](http://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 Wes Hansen 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 Wes Hansen 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:

<b>Century Club</b>	\$ 100 to \$ 499
<b>\$500 Club</b>	\$ 500 to \$ 999
<b>Millennium Club</b>	\$1000 to \$5000
<b>President's Club</b>	\$5000 and over

# ***Kansas Geological Foundation***

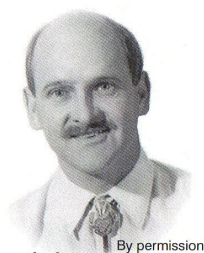
## ***Cornerstone***

### ***Kansas Geological Foundation News***

#### **Spring 2019 Scholarship Recipients**

<b>Applicant</b>	<b>University</b>	<b>Scholarship</b>	<b>Amount</b>
Ethan Reid	Fort Hays State Uni-	KGF Scholarship	\$500
Mikaela Radar	Kansas State Univer-	KGF Scholarship	\$750
Luke Rijfkogel	Kansas State Univer-	Robert Cowdery KGF Scholarship	\$1000
Rhowe Stefanski	Kansas State Univer-	KGF Scholarship	\$750
Isaac Allred	University of Kansas	KGF Scholarship	\$750

### **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- Dennis Hedke**  
**Vice President - Brian Fisher**  
**Treasurer - Bryce Bidleman**  
**Secretary - Ted Jochems**

#### **Board Members**

**Dave Callewaert**      **Michel Runnion**  
**Ken Leblanc**        **Larry Friend**  
**Corey Baker**

**Scholarships - Maurice Korphage**  
**Publicity - Wes Hansen**

# ***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.

## **Scholarship Applications for the Spring semester will be due by December 1, 2019.**

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

If you are in the KGS Library and see Ted Jochems or any of the integrators, give any of them a great big thanks for their efforts in continuing the tedious process of examining, scanning and integrating new logs and geologist's reports etc. into our library and the WDL.

---

As of January 1, 2019, the Foundation has **two full time employees** working on well log integration: Helen Cruz and Shuyao Li (a.k.a. Emily) along with Ted Jochems. They work forty hours per week, with Ted Jochems putting in 20-30 hours. More than a dozen other part-time integrators have worked on the project since 2010.

---

## **Grant Request Recipients**

**Dr. Hendratta Ali - Fort Hays State University    \$1,000.00**

## **Integration Update May 31, 2019**

From 01 January to 31 May of 2019, 11,207 well logs were examined by the integrators. 2,670 (23.8%) were new logs for the Walters Digital Library. 1,082 logs were re-scanned to replace poor existing digital images.

Over the eight year history of the integration project, 186,699 well logs have been examined. 54,453 (29.2%) were new to the WDL, with 3,978 logs re-scanned to replace poor existing images.

With Shuyao Li (Emily) and Helen Cruz becoming full time KGF employees, the estimated wages and benefits for these two ladies for 2019 is \$71,230. Ted Jochems requests that the KGF board continue to allocate \$15,000 for his services as a contractor/consultant. The total estimated cost of well log integration for 2019 is \$86, 230.

Thank you to Randy Wolf and Gore Oil Company for their recent donation of data and cabinets.

Submitted by Ted Jochems



# Kansas Geological Foundation Memorials

KGS Member	Date Deceased	Memorial Established
Dan Bowles	09/89	1990
John Brewer	10/89	1990
George Bruce	08/89	1990
Robert Gebhart	01/90	1990
Ray Anderson, Jr.	11/90	1990
Harold McNeil	03/91	1991
Millard W. Smith	08/91	1991
Clinton Engstrand	09/91	1991
M.F. "Ted" Bear	10/91	1991
James & Kathryn Gould	11/91	1991
E. Gail Carpenter	06/91	1993
Benton Brooks	09/92	1992
Robert C. Armstrong	01/93	1993
Nancy Lorenz	02/93	1993
Norman R. Stewart	07/93	1993
Robert W. Watchous	12/93	1993
J. George Klein	07/94	1994
Harold C.J. Terhune	01/95	1995
Carl Todd	01/95	1995
Don R. Pate	03/95	1995
R. James Gear	05/95	1995
Vernon Hess	06/95	1995
E. K. Edmiston	06/95	1995
Jack Rine	07/95	1995
Lee Cornell	08/95	1995
John Graves	10/95	1995
Wilson Rains	10/95	1995
Heber Beardmore, Jr.	09/96	1996
Elmer "Lucky" Opfer	12/96	1996
Raymond M. Goodin	01/97	1997
Donald F. Moore	10/92	1997
Gerald J. Kathol	03/97	1997
James D. Davies	08/88	1997
R. Kenneth Smith	04/97	1997
Robert L. Dilts	05/97	1997
Delmer L. Powers	06/72	1997
Gene Falkowski	11/97	1997
Arthur (Bill) Jacques	01/98	1998
Bus Woods	01/98	1998
Frank M. Brooks	03/98	1998
Robert F. Walters	04/98	1998
Stephen Powell	04/98	1998
Deane Jirrels	05/98	1998
William G. Iversen	07/98	1998
Ann E. Watchous	08/98	1998
W.R. "Bill" Murfin	09/98	1998
Donald L. Hellar	11/98	1998
Joseph E. Rakaskas	01/99	1999
Charles W. Steincamp	02/99	1999
Robert and Betty Glover	10/96	1998
Howard E. Schwerdtfeger	11/98	1999
W. W. "Brick" Wakefield	03/99	1999
V. Richard Hoover	01/00	2000
Warren E. Tomlinson	01/00	2000
James A. Morris	01/00	2000
Eric H. Jager	03/00	2000
Kenneth W. Johnson	03/00	2000

# Kansas Geological Foundation Memorials

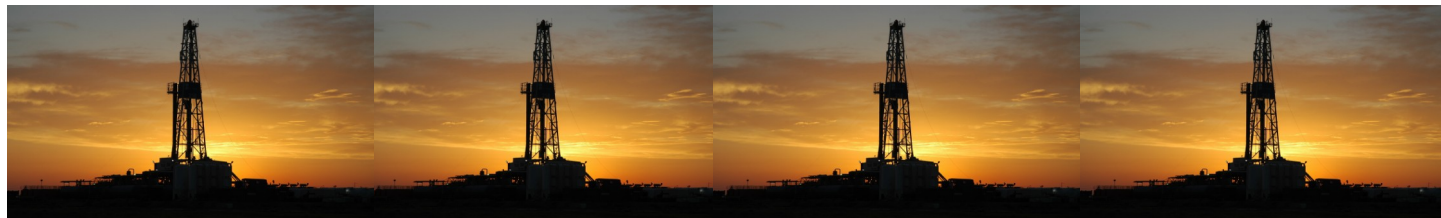
KGS Member	Date Deceased	Memorial Established
Dean C. Schaake	03/00	2000
Fred S. Lillibridge	05/00	2000
Jerry A. Langrehr	07/00	2000
Clark A. Roach	07/00	2000
Floyd W. "Bud" Mallonee	10/00	2000
Ralph W. Ruuwe	09/00	2000
Robert L. Slamal	02/01	2001
Jerold E. Jespersen	06/01	2001
William A. Sladek	06/01	2001
Harlan B. Dixon	06/01	2001
Edward B. Donnelly	08/01	2001
Richard P. Nixon	02/02	2002
Robert W. Frensley	12/01	2002
Gerald W. Zorger	01/02	2002
Don L. Calvin	03/02	2002
Claud Sheats	02/02	2002
Merle Britting	2002	2002
Harold Trapp	11/02	2002
Donald M. Brown	11/02	2003
Elwyn Nagel	03/03	2003
Robert Noll	09/03	2003
Benny Singleton	09/03	2003
Jay Dirks	2003	2003
J. Mark Richardson	02/04	2004
John "Jack" Barwick	02/01	2004
Richard Roby	03/04	2004
Ruth Bell Steinberg	2004	2004
Gordon Keen	03/04	2004
Lloyd Tarrant	05/04	2004
Robert J. "Rob" Dietterich	08/96	2004
Mervyn Mace	12/04	2004
Donald Hoy Smith	04/05	2005
Richard M. Foley	06/05	2005
Wayne Brinegar	06/05	2005
Charles B. Moore	09/96	2005
Jack Heathman	05/06	2006
Charles Kaiser	09/06	2006
Rod Sweetman	08/06	2006
Karl Becker	10/06	2006
Frank Hamlin	10/06	2006
Marvin Douglas	12/06	2006
Robert W. Hammond	04/07	2007
Eldon Frazey	04/07	2007
Pete Amstutz	05/07	2007
Charles Spradlin	05/07	2007
Donald R. "Bob" Douglass	09/07	2007
Vincent Hiebsch	11/07	2007
Glen C. Thrasher	03/08	2008
Peg Walters	06/08	2008
Theodore "Ted" Sandberg	07/08	2008
James Ralstin	11/08	2008
Earl Brandt	04/09	2009
Walter DeLozier	05/09	2009
Don D. Strong	1/10	2010
John Stone	02/10	2010

# Kansas Geological Foundation Memorials

KGS Member	Date Deceased	Memorial Established
Craig Caulk	03/10	2010
Joseph E. Moreland, Jr.	03/10	2010
Gene Garmon	03/10	2010
James F. Dilts	05/10	2010
Jerry Pike	05/10	2010
Donald Hollar	06/10	2010
Delbert Costa	08/10	2010
John Tanner	08/10	2010
William (Bill) Owen	09/10	2010
Harold (Hal) Brown	10/10	2010
Edmund G. Lorenz	11/10	2010
Thomas E. Black	05/11	2011
Wayne E. Walcher	07/11	2011
Henry F. Filson	07/11	2011
Thomas Ray	07/11	2011
Edgar E. Smith	09/11	2012
Marilyn Messinger	06/13	2013
Micheal Mitchell	09/13	2013
Orvie Howell	11/13	2013
James Thompson	11/13	2013
Dick Rowland	09/13	2014
Robbie Thompson	12/13	2014
Kris Kennedy	04/14	2015
Annette Hedke	02/15	2015
James Devlin	04/15	2015
Robert Gensch	09/15	2015
Jerald Rains	05/16	2016
Max Houston	05/16	2016
Robert "Gus" Messinger	01/17	2017
Jimmy Wayne Gowens	04/17	2017
Walter H. Martz Jr.	01/18	2018
Gary Sandlin	01/17	2018
Douglas McGinness	12/16	2018
Allen Siemens	06/18	2018
Ernest R. "Ernie" Morrison	09/18	2018
E. G. "Elbie" McNeil	12/18	2018
Robert Maxwell (Bob) Euwer	1/19	2019

---

**The costs for printing and mailing the bulletin far exceed the ad revenue. Advertising revenue received in 2018 totaled \$ 3,590.00. Printing and postage costs for 2018 totaled \$13,605.48. A shortfall of \$10,015.48. Currently, one can view the bulletin online from the Kansas Geological Society website and print from one's own computer. As editor and manager, I have decided to have the Bulletin be digital only effective January 2020.**





**12 Drilling Rigs**

**To depth of 8,500 ft.**



**WESTERN KANSAS  
SOUTHERN NEBRASKA  
EASTERN COLORADO**

For contract information contact:

**Will Murfin**  
Drilling Manager

**316-258-8888 (Direct)  
316-267-3241 (Main)**

**250 N. Water, Ste. 300  
Wichita, KS 67202**

**DUKE**  
**DRILLING COMPANY**  
**ROTARY DRILLING CONTRACTOR**  
620 Hubbard PO Box 823  
Great Bend, KS 67530  
Phone 620-793-8366  
100 S. Main, Ste. 410  
Wichita, KS 67202  
Phone 316-267-1331  
Fax 316-267-5180



**2D & 3D Vibroseis Acquisition  
ARAM\*AIRES Seismic Recording System**

1600 Broadway, Suite 1660 • Denver, CO 80202-4915  
(303) 592-5220 • [info@lockhartgeo.com](mailto:info@lockhartgeo.com)  
for complete information go to: [www.lockhartgeo.com](http://www.lockhartgeo.com)

***Your Company***

***1/4 page ad***

***here***

**AAPG Needs You!**

**Professional geoscientists, share your world!**

The Mid Continent Section has **17 AAPG Student Chapters**, but only **3 Visiting Geoscientists**...which makes it almost impossible to have a professional geoscientist visit to each school at least once a year or even once every two years. The aim of AAPG's program is to give students a flavor of a professional life in energy resources. It also hopes to encourage dialog between industry and academia.

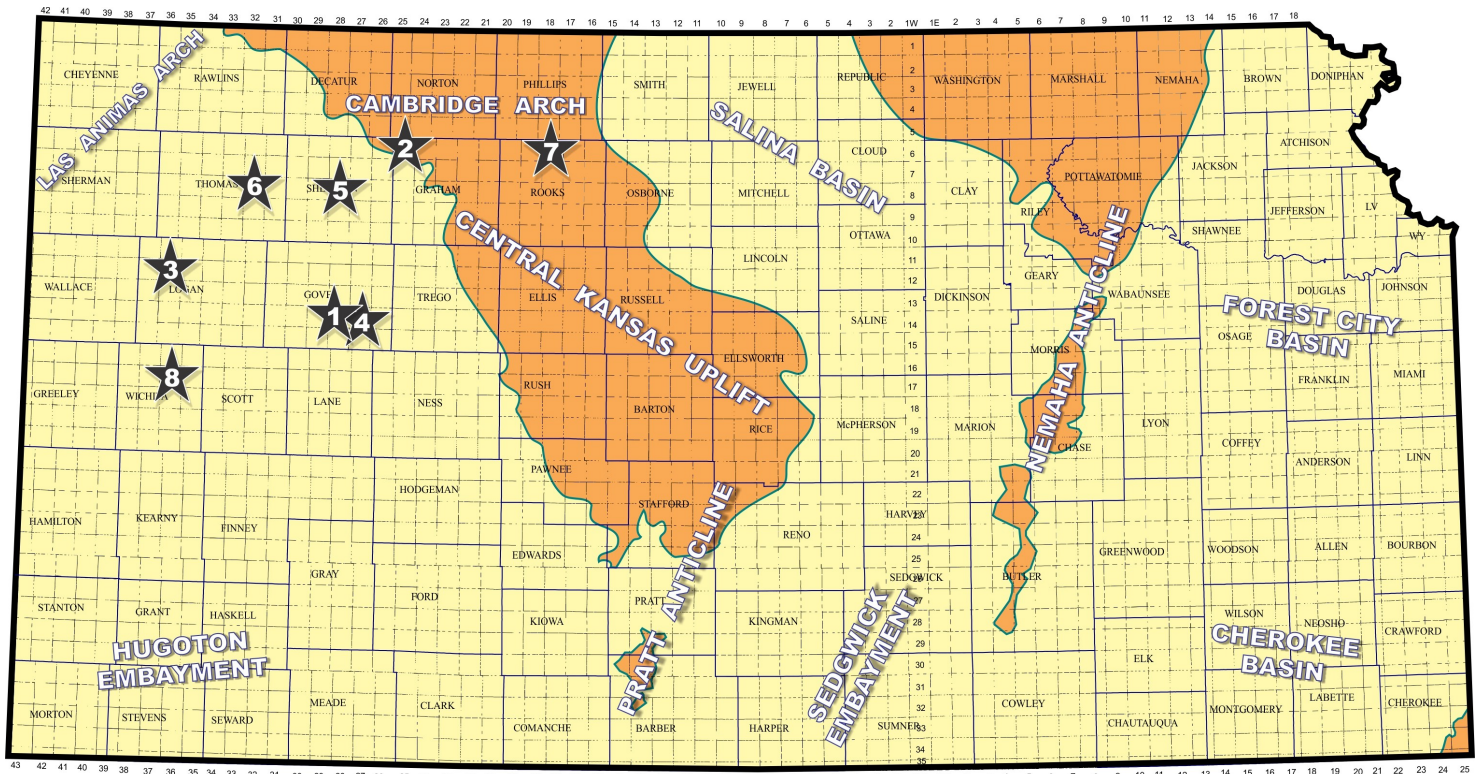
To be a Visiting Geoscientist bearing the AAPG flag, you are asked to have at least 5 years of experience and make at least one visit per year to a university. It can be a school with an AAPG Student Chapter, or a college/university without one. Your choice.

The Mid Continent schools with Student Chapters are: Missouri University, Fort Hays State University, Iowa State University, Kansas State University, Missouri State University, University of Nebraska, Northwest Missouri State University, Oklahoma State University, University of Oklahoma, University of Arkansas, University of Iowa, University of Kansas, University of Missouri, Columbia University of Tulsa and Wichita State University.

Contact Robbie Gries, co-Chair VGP committee, Denver, if you are interested in learning more. [rrgries@aol.com](mailto:rrgries@aol.com)

# Exploration Highlights

By John H. Morrison, III  
Independent Oil & Gas



Map courtesy of Marc Summerville

- 1.) Palomino Petroleum, Inc, Newton (KS), is producing an unknown amount of crude oil from the Pawnee and Fort Scott Limestones in the Marmaton Group at the #1 Ziegenbalg Trust in Gove County. The wildcat pool opener was drilled to a total depth of 4420 ft in the SE/4 of section 35- T14s- R28W, eleven miles south and five miles east of Gove, Kansas. Oil deposits were found on separated feature that lies southeast of Lansing - Kansas City and Marmaton oil production in the Leighton West Field. The field was discovered by Donald C. Slawson in 1977 and has given up almost 265,000 bbls of oil to date. Palomino's new oil field has not been named.
- 2.) L. D. Drilling, Inc, Great Bend (KS), has a new unnamed oil pool discovery at the #1-27 Hickert Farms in Graham County. The new oil reserve was discovered in the NE/4 of section 27- T6s- R25W, about ten miles north and one mile west of Morland, Kansas. The wildcat well is producing an undisclosed amount of crude oil from lower Kansas City perforations from 3758 to 3864 ft. Rotary total depth is 3996 ft. Discovery site lies over one mile southeast of the two-well Schoen Field, which was established in 2011 by Blueridge Petroleum Corp. The new field has not been named.
- 3.) Ritchie Exploration, Inc, Wichita (KS), has established the new Noslen West Field in Logan County with the successful completion of their #1 Collins 32C. Oil deposits in the Pleasanton and Marmaton (Altamont) formations were discovered in the SW/4 of section 32- T12s- R36W, about six miles south and five miles west of the town of Winona, Kansas. The wildcat well was drilled to a total depth of 4840 ft into the Mississippian. First production began in April, 2019.

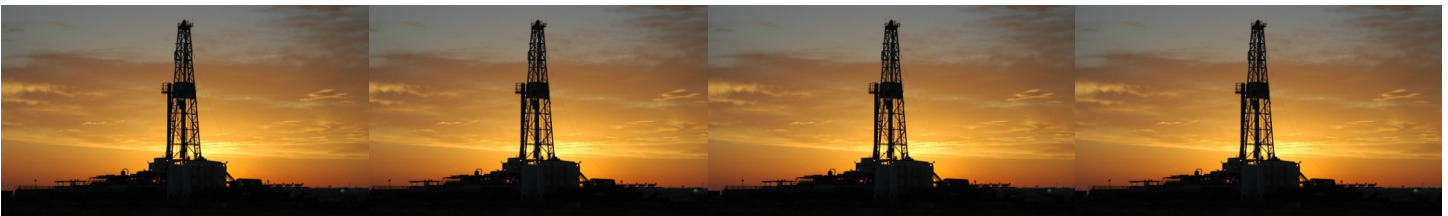
4.) Cobalt Energy LLC, Wichita (KS), is producing an undisclosed amount of crude oil from the Mississippian formation at the #1-5 JE Unit 'A' in Gove County. The 4348-ft deep well was drilled on an isolated structural feature in the SW/4 of section 5- T14s- R27W - just north of the Castle Rock North Field (1984). The Castle Rock North Field currently produces oil from both the Lansing - Kansas City and Mississippian formations. The well establishes the new Morning Glory Field approximately six miles south and seven miles east of Gove, Kansas.

5.) Pioneer Oil Company, Inc, Vincennes (IN), has established new Lansing - Kansas City oil production in the SW/4 of section 28- T8s- R28W with the completion of the #1-28 Schamberger. The Sheridan County well establishes a new unnamed oil field nearly one mile north of production in the Freda North Field. The field was discovered in 1991 by Bowman Oil Company. Pioneer Oil added Lansing - Kansas City pay to the field's resources in 2015. The Schamberger well was drilled to a total depth of 4200 ft by Discovery Drilling tools. Site is located two miles southwest of the town of Hoxie, Kansas.

6.) Arcadian Resources LLC, Hays (KS), has discovered oil deposits in the Pennsylvanian System Limestone at the #1-19 Liam, spotted in the NE/4 of section 19- T8s- R32W in Thomas County. Though the exact pay source is confidential, operator's objective zones of interest included the Lansing - Kansas City, Marmaton and Cherokee formations. Wellsite is located about 3/4-mile northeast of Marmaton (Altamont) oil production in the one-well Kindig Northwest Field (2007), and is one mile northwest of Cherokee oil production in the now abandoned, two-well Kindig Northeast Field (2008). Total depth of the Liam well is 4724 ft. Arcadian's latest find is located about two miles south and six miles east of the town of Colby, Kansas.

7.) L. D. Drilling, Inc, Great Bend (KS), has discovered oil deposits at a wildcat well drilled in Rooks County in the NW/4 of section 24- T6s- R18W, approximately four miles north of Stockton, Kansas. The #1-24 Terry was drilled to a rotary total depth of 3610 ft at site located over one mile south of the Faubion South Field. The field was established in 2007 by Trans Pacific Oil Corporation. It has produced nearly 15,000 bbls of oil from the Lansing - Kansas City formation. Production zone of L. D. Drilling's new discovery is unknown. The Arbuckle formation was also a targeted zone of interest by the operator. The new field has not been named.

8.) Landmark Resources, Inc, Houston (TX), reports new Marmaton oil production has begun at the #1-17 Double Bar X wildcat well in Wichita County. Spotted in the SW/4 of section 17- T17s- R36W, the new unnamed pool discovery is situated over one mile southeast of similar Marmaton pays (Altamont and Pawnee) in the Wilbur Field, which was discovered by Ritchie Exploration in 2018. Murfin Drilling tools were used to drill the Double Bar X to a total depth in the Mississippian at 4880 ft. Wellsite is located five miles north and one mile east of the City of Leoti, Kansas.





# CHANGE SERVICE REQUESTED

KGS BULLETIN  
July - August 2019

## July 2019

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

## August 2019

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