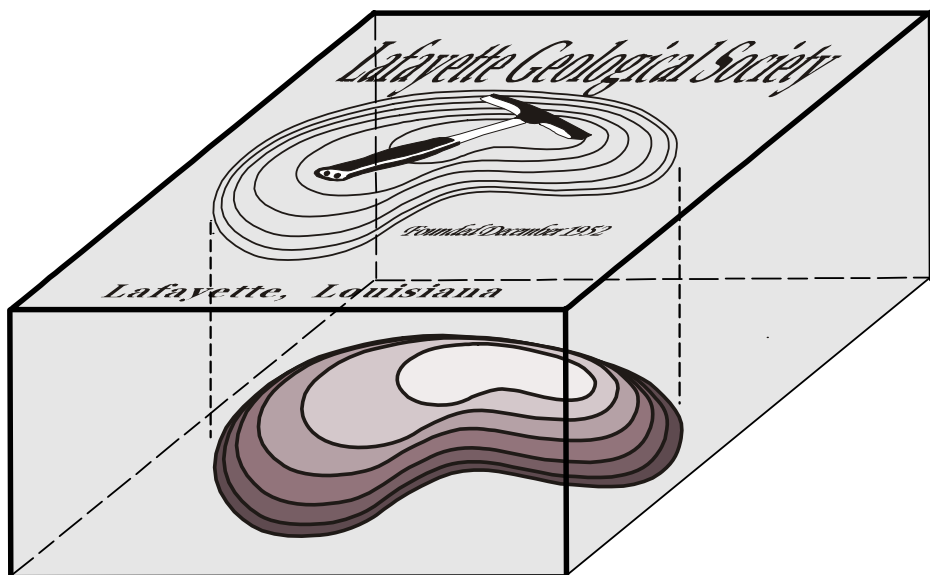


Lafayette Geological Society **BULLETIN**

Volume 58, No. 7

March 2014



Joint LGS and AADE Luncheon Meeting
Wednesday, March 19, 2014
11:00 am – 1:00 pm
Lafayette Petroleum Club
Cost: \$20

Luncheon Presentation

**An Engineering Look at the Cause
of the 2010 Macondo Blowout**

J. A. (John) Turley
Marathon (retired) and Author (present)

Visit the LGS website at:
lafayettegeologicalsociety.org

LAFAYETTE GEOLOGICAL SOCIETY

2013-2014

President	Jerry Yunker Badger Oil Corp.	337-735-3310 j.yunker@badgeroil.com
President Elect	Craig Glassinger	337-334-9832 mglassinger@yahoo.com
Vice President	Kelly Poret Stone Energy	337-521-2059 poretkl@stoneenergy.com
Treasurer	Samantha Leone Freeport-McMoran	337-354-5043 Samantha_Leone@fmi.com
Secretary	David Sturlese Hunter Exploration Co.	337-989-3395 david@hunterexpl.com
Past Pres.	James J. Willis Odyssey Int'l, LLC	337-277-3652 lgseditor@msn.com
Director	W. R. (Bill) Finley Rozel, LLC	337-237-7788 wrfinley@rozel.com
Director	Joey Grimbail Chevron	337-529-2505 jgrimbail@chevron.com

BULLETIN/WEBSITE STAFF

Bulletin Editor and Publisher	James Willis Odyssey Int'l, LLC	337-277-3652 lgseditor@msn.com
Website	John Boggs Stratagraph, Inc.	337-303-7026 customersupport@ninjamouse.com

LGS DELEGATES TO AAPG

Travis Helms King Munson

LGS HONORARY MEMBERS

<i>Robert Anderson</i>	<i>Thomas Eby, Jr.</i>	<i>Brian Lock</i>
<i>Charles Barton</i>	<i>Peter G. Gray</i>	<i>Jack Martin</i>
<i>Frank Harrison</i>	<i>Marvin Munchrath</i>	<i>Robert Copeland</i>
<i>Jim Dungan</i>	<i>Tim Rynott</i>	



LGS 2013 – 2014 Officers

Jerry Yunker, Craig Glassinger, Bill Finley, Kelly Poret, Joey Grimball, and David Sturlese. Not Pictured: Samantha Leone, James Willis, and John Boggs.

**LGS Luncheon Meeting
Wednesday, March 19, 2014
11:00 am to 1:00 pm
Lafayette Petroleum Club
Cost: \$20**

**An Engineering Look at the Cause
of the 2010 Macondo Blowout**

***J. A. (John) Turley
Marathon (retired) and Author (present)***

President's Column



Greetings.

Now that Mardi Gras has passed, and hopefully the last of the ice storms for this winter, we turn our attention to warmer weather and outdoor pursuits. Warmer weather brings a couple of LGS related outdoor activities—our annual LGS Golf Tournament and at least one field trip.

LGS is arranging a field trip to northern New Mexico in May of this year. The trip cost will be \$650 ± (depending on the number of participants) for transportation in New Mexico, some meals and lodging. Transport to and from Albuquerque is the participant's responsibility. Trip details are located on the LGS website: http://lafayettegeologicalsociety.org/wp/?page_id=397.

LGS needs to provide Barry a headcount of participants shortly so arrangements can be made in New Mexico for transport, food, and lodging. Final trip payment will be due in mid-April 2014. Please let Tim Duex know if you'd like to participate. His email is: twd7693@louisiana.edu.

The **LGS Golf Tournament** is scheduled for the Wetlands Golf Course here in Lafayette on Friday, April 11. Activities begin at 11:00 AM with registration and driving range practice, lunch starting at 11:30 followed by a shotgun start at 1:00 PM. Tim Bennett and his crew do a great job with the Golf Tournament and can always use an extra hand both before and during the actual event. If you can help Tim in any way please contact him at 337-291-2720 Ext. 106 or via email at tim@orbitenergy.com. We are also looking for Tournament sponsors as individual hole sponsors, closest to the hole and longest drive sponsors, ditty bag sponsors, or Contributors at various levels which will include tee box sign(s) depending on the level. Details regarding the Golf Tournament and sponsor and contributor opportunities are on the "News and Information section of the LGS website: <http://lafayettegeologicalsociety.org/wp/?cat=9>.

Indoors this month our **monthly lunch meeting** at the Petroleum Club on March 19 will feature a presentation by Dr. John Turley entitled "An Engineering Look at the Causes of the 2010 Macondo Blowout." This is a joint meeting with the Lafayette Chapter of the AADE (American Association of Drilling Engineers) and will likely be well attended. I was present at an earlier version of this last October and was impressed with the no nonsense "just the facts" style of the presentation. I think you will have a much clearer understanding of the engineering events associated with this event after the presentation. **Thanks to Halliburton for sponsoring** the student lunches at the meeting.

Solicitation of 2014-15 LGS officer candidates is ongoing and voting for those officers for the 2014-15 LGS year is approaching. We need a slate of candidates for President-Elect, Vice-President, Secretary, Treasurer, and an

(continued on page 19)

LGS
CORNERSTONE MEMBERSHIP

LGS wishes to thank its **Cornerstone Members** for their annual financial support of speaker programs, continuing education, UL-Lafayette scholarships, social functions, and community services.

PLATINUM MEMBERS

NONE

GOLD MEMBERS

James R. Dungan
Robert George

Brian E. Lock
Joe R. Klutts

SILVER MEMBERS

Tim J. Bennett
Steve D. Caffery
Joseph C. Franklin
Craig Glassinger

William S. Grubb
Gary P. Huffman
W. K. Rainbolt, Jr.
William F. Ripley

BRONZE MEMBERS

Arthur H. Johnson
Cordell Johnson
Jim P. Miller

Dudley P. Montero
Samuel G. Porter
George R. White

MARCH LUNCHEON PRESENTATION **(to be held jointly with AADE)**

"An Engineering Look at the Cause of the 2010 Macondo Blowout"

J. A. (John) Turley
Marathon (retired) and Author (present)



Summary

In Turley's presentation, he will review:

- Wellbore mechanics prior to temporary abandonment;
- The temporary-abandonment procedure—simulating, testing, confirming security, installing barriers, displacing the riser, pulling BOPs, and releasing the rig; and
- Post-blowout forensics—the formation of a fluid leak, testing for leaks, exacerbating the unseen leak, annular communication, changing test protocols, multitasking complications, declaring the well secure, causing the well to flow, and allowing the well to flow unseen until too late.

**Thanks to Halliburton for
sponsoring student attendees
at the March luncheon
meeting.**

Biography

John Turley's résumé includes Phillips Petroleum, Fluor Ocean Services, Tenneco Oil, Marietta College (professor, petroleum engineering), and twenty-five years with Marathon Oil, as Gulf Coast drilling manager, U.K. operations manager, manager of worldwide drilling, and VP of engineering & technology. His academics include petroleum engineering (Colorado School of Mines), ocean engineering (U of Miami), and executive education at Harvard. Following BP's April 2010 blowout, Turley studied well data and investigative reports, ignored finger-pointing and hearsay evidence, and assessed the cause of the blowout from engineering and management perspectives. Turley speaks to energy companies, universities, professional societies, and civic groups on the topic. His simple mantra: *Only if we understand and care about the cause of one of the most lethal, manmade, environmental disasters in U.S. history, will we know why it should not have happened and why it should never happen again.*

More information about Turley, his research, and his book, *THE SIMPLE TRUTH: BP's Macondo Blowout*, can be found in his website: JohnTurleyWriter.com



*Finding & Producing Oil & Gas
in the Gulf Coast*

David Etienne
Don Sobba
Lanny Jackson
James Crane
Jerry Yunker
Mark Hilliard

3861 Ambassador Caffery
Suite 400
Lafayette, LA 70503

Phone: (337) 233 – 9200
Fax: (337) 237-5158

“Causes Now in Operation”

Randy Bissell* with Emily Bissell

On December 21, 2012, my daughter Emily and I were on the way to work when I abruptly stopped my truck and pulled alongside the seawall to give her a lesson on one of the fundamental concepts of geology. (As you also may recall, this was to be the last day of the planet's existence. I thusly felt that tender moments like this were called for.)

In 1830, Charles Lyell wrote his famous book **PRINCIPLES OF GEOLOGY, BEING AN ATTEMPT TO EXPLAIN THE FORMER CHANGES OF THE EARTH'S SURFACE, BY REFERENCE TO CAUSES NOW IN OPERATION** to explain his observations by phenomena observed in the modern world. Today, we call this concept “uniformitarianism” and it undergirds our understanding of geological process. No geologist (I know) drives through the countryside without considering how things were formed. Going to the beach, floating a river, or looking out an airplane window provides the geologist insight into how the landscapes of the ancient ages evolved—how the pages of geologic history are slowly imprinted and bound into the chapters of time.

On December 21, 2012, the concept of uniformitarianism was rumbling around in my head. I had given a “stratigraphy” lecture on it earlier in the week during the intercession Field Course at Texas A&M at Kingsville. In presenting to the students, I tried to tie the classic concept of uniformitarianism to the modern views on sequence stratigraphy. What caught my eye on the way to work provided that perfect tie—I wish all those students were with me.

A common phrase related to uniformitarianism is that “the present is the key to the past.” Fifteen years ago, when I worked as a “sequence stratigrapher” at Exxon, we used to joke that the “present is the key to the highstand!” The slow rise in sea level over the past 10,000 years results in a coastal geomorphology dominated by back-stepping shorelines with flooded estuaries and bays. Looking at seismic stratigraphy worldwide, it seemed that all the cool stuff happened when sea level was falling.

On December 21, 2012, sea level fell...at least a little bit. As I drove north on Shoreline Drive, I noticed that the bay was unusually low.

(continued on page 20)

*Randy Bissell is a geologist with Headington Oil in Corpus Christi, Texas. Emily Bissell is a student at Stephen F. Austin University in Nacogdoches, Texas, majoring in geology and art. Essay originally published in *CCGS Bulletin*.

Don't forget to pay your dues!!

Please make payments to LGS, P.O. Box 51896, Lafayette, LA 70505 to continue receiving the Bulletin or avoiding non-member lunch costs.

BASIN EXPLORATION, INC.

Purchasing and Developing Oil and Gas Projects/ Property Acquisitions in the Gulf Coast Region

John Duhon *200 Travis, Ste. 201*
Braden Despot *Lafayette, LA 70503*
Mark Despot *(337) 233-9199*
Marlin Roberts *FAX (337) 233-9198*
Helen Brierre

GEORGE N.

MAY

& ASSOCIATES

Consulting Geologists and
Paleontologists

WILLIAM S. GRUBB

201 HEYMANN BLVD.
P.O. BOX 51858
LAFAYETTE, LA 70505

OFFICE (337) 234-3379
FAX (337) 234-3389
HOME (337) 235-1923

JAMES O. UNDERWOOD
CONSULTANT

Geologist

Logging Supervision/Evaluation/QC

120 Catherine St. (337) 235-0750
Lafayette, LA 70503 (337) 654-6597

SOLEX CORP.

Philip C. Judice
Consulting Geologist

900 East Bayou Parkway
Lafayette, LA 70508
Phone: (337) 235-4643

LEO R. BADER, JR.

P.O. BOX 51515
Lafayette, LA 70505

337-237-0274

Calendar of Upcoming Events

Mar. 19, 2014 — LGS and AADE: Joint Lafayette Geological Society and American Association of Drilling Engineers luncheon meeting, 11:00 am at the Petroleum Club in Lafayette — John Turley, Marathon (retired) and Author (present), will present “An Engineering Look at the Cause of the 2010 Macondo Blowout.” Please see page 4 for more details.

Mar. 28, 2014 — NOGS: New Orleans Geological Society Spring Social, 5:00–8:00 pm at the Old Rail Brewery, 639 Girod St., Mandeville, Louisiana — Please visit <http://www.nogs.org/wp-content/uploads/2014/03/NOGS-Spring-Social.pdf> for more information.

Apr., 2014 — API: Teche Chapter of the American Petroleum Institute, 11:30 am at the Petroleum Club in Lafayette — As of press time, no scheduled events are listed on their website www.api-teche.org.

Apr., 2014 — SPE: Society of Petroleum Engineers Evangeline Section, 11:30 am at the Petroleum Club in Lafayette — No scheduled events as of press time. Please visit <http://www.spe-laf.org/site.php> for more information, as the meeting date approaches.

Apr. 6-9, 2014 — AAPG: American Association of Petroleum Geologists Annual Convention and Exposition at the George R. Brown Convention Center in Houston, Texas — For more information, please visit <http://aapg.org/houston2014>.

Apr. 8, 2014 — SWLGS: Southwest Louisiana Geophysical Society, 11:30 am at the Petroleum Club in Lafayette — Speaker and topic not available as of press time. Please visit <http://www.swlgs.org/wpress/> for updated information as the meeting date approaches.

Apr. 9, 2014 — SIPES: Society of Independent Professional Earth Scientists, 11:30 am at the Petroleum Club in Lafayette — Speaker and topic not available as of press time.

Apr. 10, 2014 — SPWLA: Society of Petrophysicists and Well Log Analysts, 11:30 am at the Petroleum Club in Lafayette — Speaker and topic not available as of press time. Please visit <http://www.spwla.org/chapter/lafayette> as the meeting date approaches for more information.

Apr. 10, 2014 — SGS: Southeastern Geophysical Society Short Course on “3D Seismic Attributes for Prospect Identification and Reservoir Characterization” at the One Shell Square Auditorium, 701 Poydras St., New Orleans — Dr. Kurt Marfurt, University of Oklahoma, Norman, will conduct the training program. Please visit <http://sgs-neworleans.org/> for more information.

Apr. 10, 2014 — SGS/NOGS/SPE-Delta: Joint Southeastern Geological Society / New Orleans Geological Society / Society of Petroleum Engineers Delta Section luncheon meeting, 11:30 at the One Shell Square Auditorium, 701 Poydras St., New Orleans — Dr. Kurt Marfurt, University of Oklahoma, Norman, will

present “Seismic Clustering Uncloistered—Application to Resource Plays.” For more information, please visit <http://www.nogs.org/calendar>.

Apr. 11, 2014 — BRGS: Baton Rouge Geological Society, 11:30 am at Mike Anderson Seafood Restaurant, 1031 W. Lee Drive, Baton, Rouge, Louisiana — Speaker and topic not available as of press time. For more information, please visit www.brgs-la.org for more information as the meeting date approaches.

Apr. 15, 2014 — NOGS: New Orleans Geological Society Short Course on “Petroleum Geology for Non-Geologists,” 8:30 am–3:30 pm at the One Shell Square Auditorium, 701 Poydras St., New Orleans — Instructors will be Duncan Goldthwaite, consulting geologist, Bob Branson, consulting geologist, and Bruce Robertson, consulting geologist and geology professor at the University of Southern Mississippi. For more information, please visit <http://www.nogs.org/wp-content/uploads/2014/02/Non-Geologists-Course-Proof.pdf>.

Apr. 16, 2014 — LGS: Lafayette Geological Society luncheon meeting, 11:00 am at the Petroleum Club in Lafayette — As of press time, speaker and topic to be announced. Please visit www.lafayettegeologicalsociety.org for more information as the meeting date approaches.

Apr. 16, 2014 — BRGS and LGS: Baton Rouge Geological Society and Louisiana Geological Survey 4th Annual Louisiana Subsidence and Land Loss Symposia, with focus on Coastal Protection at the Dalton Woods Auditorium, Energy, Coast & Environment Bldg., LSU Campus, Baton Rouge — For more information: dcarlson@lsu.edu or www.brgs-la.org.

Apr. 17, 2014 — BRGS and LGS: Baton Rouge Geological Society and Louisiana Geological Survey 8th Annual Louisiana Groundwater & Water Resources Symposia, with focus on Salt Water Intrusion at the Dalton Woods Auditorium, Energy, Coast & Environment Bldg., LSU Campus, Baton Rouge — For more information: dcarlson@lsu.edu or www.brgs-la.org.



42 Years of Service



William A. Hagan

Vice President of Business Development

wahagan@stratagraph.com

Mobile: (337) 501-5025

(337) 232-5510

P.O. Box 53848

Lafayette, LA 70505

DYNAMIC EXPLORATION PARTNERS, L.L.C.

W.K. (Dub) Rainbolt, Jr.
126 Heymann Blvd.
Lafayette, LA 70503
(337) 232 - 6841

Roy Melton
524 Caminos Los Altos
Sante Fe, NM 87501
(214) 683 - 2804

Actively Seeking Oil & Gas Prospects:
Open Acreage and Leased.

SAI Geoconsulting, Inc.

*Geological and Geophysical Consulting,
3-D Seismic Interpretation
for Oil and Gas Exploration*

Ben Sydboten
Jim Miller · Sam Porter
William F. Ripley · Travis Helms
Bill Terrell · Linda Reif

(office) 337-504-3670

(fax) 337-456-8948

www.saigeoconsulting.com



When time is money, Wellsite Geoscience is money well spent.

Whether you're exploring a basin, producing a well or completing a shale play, time is money. That's why Weatherford Laboratories brings a suite of formation evaluation technologies right to the wellsite. Utilizing mud gas and cuttings, these technologies provide detailed data on gas composition, organic richness, mineralogy and chemostratigraphy in near real time. As a result, operators now have an invaluable tool to assist with sweet spot identification, wellbore positioning, completion design and hydraulic fracturing. We call it Science At the Wellsite. You'll call it money well spent.

SCIENCE AT THE WELLSITE™
www.weatherfordlabs.com

Formation Evaluation | Well Construction | Completion | Production

©2013 Weatherford. All rights reserved.



The Future Is Now



QUALITY SERVICE

DEPENDABLE EQUIPMENT

EXPERIENCED CREWS

EXCELLENT SAFETY RECORD

ARIES MARINE
CORPORATION

LAFAYETTE, LOUISIANA
WWW.ARIESMARINE.COM

SUPPLY BOATS
337-856-7380



THE NEW "TIGER SHARK" PSV
292' X 64' X 24.6'



LIFTBOATS
337-232-0335

NEED MORE TIME?

SEISMIC TIME-TO-DEPTH CONVERSION IN SECONDS

IHS Kingdom® comes through for your most time-consuming challenges.

Causing an industry paradigm shift, Kingdom's unrivaled **Dynamic Depth Conversion** simply yet scientifically converts time data to depth data in **seconds** — allowing operators to plan wells faster and more effectively make adjustments while drilling to stay in zone.



Learn more at

ihs.com/geoscience

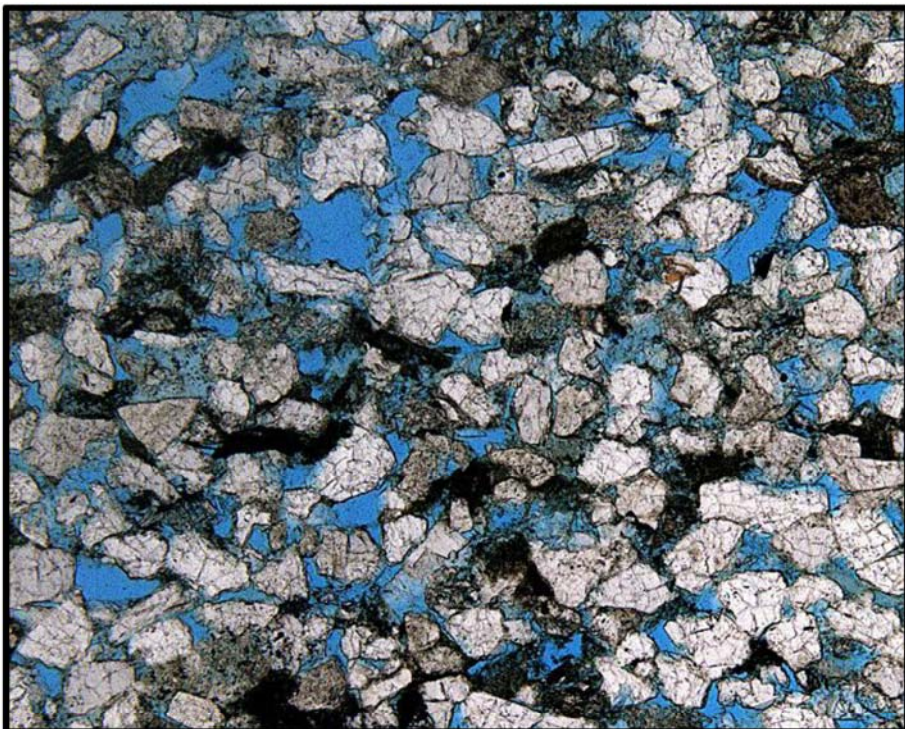


WATCH THE DEMO

SIMPLY
SCIENTIFIC



IHS KINGDOM®
**DYNAMIC DEPTH
CONVERSION**



Offshore & South Louisiana Experts

- **CORE ANALYSIS**
- **PVT FLUID EVALUATION**
- **GEOLOGIC SERVICES**

New Orleans: 504-733-6583

Broussard: 337-837-8616

Houston: 713-328-2673

www.corelab.com



1st Cav Exploration, LLC

William D. "Bill" Edwards

C. P. G. 4108



*P.O.Box 52022
Lafayette, La 70505*

337-322-0328 337-981-2803

1stCavEx@cox.net

EL TORO PETROLEUM CORP.

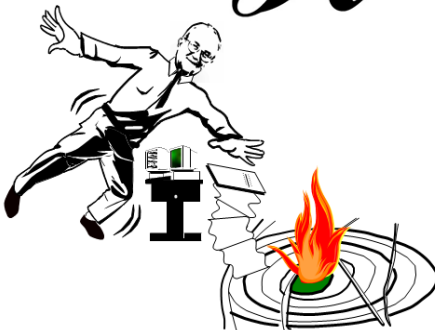
P.O. Box 52241
Lafayette, LA 70505
Phone: (337) 235-5288
Roland D. Liberda

JACK P. MARTIN Petroleum Geologist

P.O. Box 51134
(337) 232-4088

Lafayette, LA 70505
Fax: (337) 234-5320

Klutts
ReXploration L.L.C.



P.O. Box 81218
Lafayette, LA 70598-1218
221 Rue De Jean, Suite 135
Lafayette, LA 70508

Phone: (337) 264-1606
Fax: (337) 264-9982
Cell: (337) 288-6648
Home: (337) 984-3353

kluttsjr@cox-internet.com

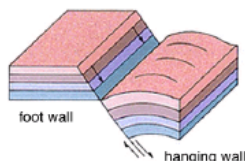
"Ready to stumble into something good?"

Joe R. Klutts

The Baton Rouge Geological Society and the Louisiana Geological Survey Announce Two Annual Symposia

Baton Rouge Geological Society & Louisiana Geological Survey

Fourth Annual Louisiana Subsidence & Land Loss Symposia



Focus on Coastal Protection

April 16th 2014

Eighth Annual Louisiana Groundwater & Water Resources Symposia



Focus on Salt Water Intrusion

April 17th 2014

**Dalton Woods Auditorium, Energy Coast & Envir. Building
Louisiana State University, Baton Rouge, Louisiana**

**For more information send an e-mail to dcarlson@lsu.edu
or go to brgs.la.org/**

**Presentation:
Titles due March 10, 2014
Abstracts due April 1, 2014**



LAFAYETTE GEOLOGICAL RESEARCH CENTER, LLC

201 Heymann Blvd., Suite 33 • Lafayette, LA 70503

Tel: 337-233-8197 • Fax: 337-233-8177

COVERAGE:

Louisiana / Federal / State Offshore

- *Multi State Geo Tech Services* • *Completion Data*
- Production Data* • *Well Logs* • *Maps*

~ MEMBERSHIPS AVAILABLE ~

The Industry's Premier • Well Data Center

orders@lafayettegrc.com

CALL OR EMAIL TODAY FOR MORE INFORMATION!



219 Jacqueline Drive
New Iberia, Louisiana 70563
Email: LITHOLOG@aol.com

Wes Pattillo
President/Sales

Phone/Fax
(337) 367-5178



"Engage, Enhance, Excel"

UL-Lafayette AAPG Student Chapter

The members of the University of Louisiana at Lafayette's AAPG Student Chapter strive to emulate what the AAPG represents. There is a strong belief in taking one's training into their own hands among the students at this university, and we actively seek out additional knowledge in order to enhance our skills. With the reinstatement of the AAPG student chapter program at this university in 2012, our students are now readily able to seek out intriguing and insightful guests, and search for relevant areas to visit for hands-on experiences.

A primary goal for our chapter during the 2014 spring semester is to conduct a field trip to visit the Fayetteville Shale outcroppings, of the Arkoma Basin, located in northern Arkansas. The outcrops are well exposed along Highway 65 near Marshall, AR, and Highway 66 near Oxley, AR. The trip will be open to both students and local industry professionals. The trip will take place in mid-April, lasting 3 or 4 days, based on availability. During the trip, we hope to stay at the Buffalo National River, near Marshall, AR. This site will not only provide an entertaining and interesting place for us to stay, it is also close to the outcrops. The chapter also hopes to provide field guides for each participant. The chance to visit outcrops of a currently producing resource play, such as the Fayetteville Shale, will provide supplemental education for our members beyond the classroom. The ability for our chapter to provide such opportunities is a pivotal aspect of what this organization expects to accomplish. However, the challenges of planning and funding such a trip for a new chapter are clear. Any financial investment that our chapter can receive from the local Lafayette petroleum industry would be greatly appreciated, and is vital if this trip is to take place. Our chapter firmly believes that these types of trips provide invaluable experiences for our members.

—Christopher Murley, UL Lafayette AAPG Student Chapter President

For more information regarding how to make a contribution, please contact our chapter at: aapg@louisiana.edu. Also, visit us at our new website: <http://ul-aapg.weebly.com>.

Adviser that can be presented to the membership by the April 16th lunch meeting.

Consider helping out your Society by serving as an officer for at least 1 term. We have a lot of original thinking people in this group and we'd like to put some of those ideas into action. Contact me or any of the other Officers of the LGS if you will assist your Society. Our contact info is on the LGS website at http://lafayettegeologicalsociety.org/wp/?page_id=9.

One more upcoming LGS event is the **Dino Dig** or its' descendant version scheduled for Tuesday, April 29, at Broadmoor Elementary school. Julia Battle is coordinating this for LGS and is an opportunity for us to introduce students to geology with a hands-on experience involving paleontology. It takes several volunteers to help Julia make this a good experience for both the teachers and the students so contact Julia to give this project the hand it deserves at: jugie@centurytel.net.

See you at our events.

jy



Jon Q=Petersen, President
Autie T. Orjias, V. P. /Land Manager
Dean Giles, Secretary/Treasurer
Joe R. White, Jr., Chief Geologist
S. Cody Lenert, Geologist
Ryan Q=Petersen, Land
Rhonda White, Admn. Assistant

401 Edwards Street, Suite 1200
Shreveport, LA 71101

P.O. Box 1367
Shreveport, LA 71164

(318) 222-8406 Fax (318) 222-6061
email: mei@marlinexploration.com

(continued from page 6)

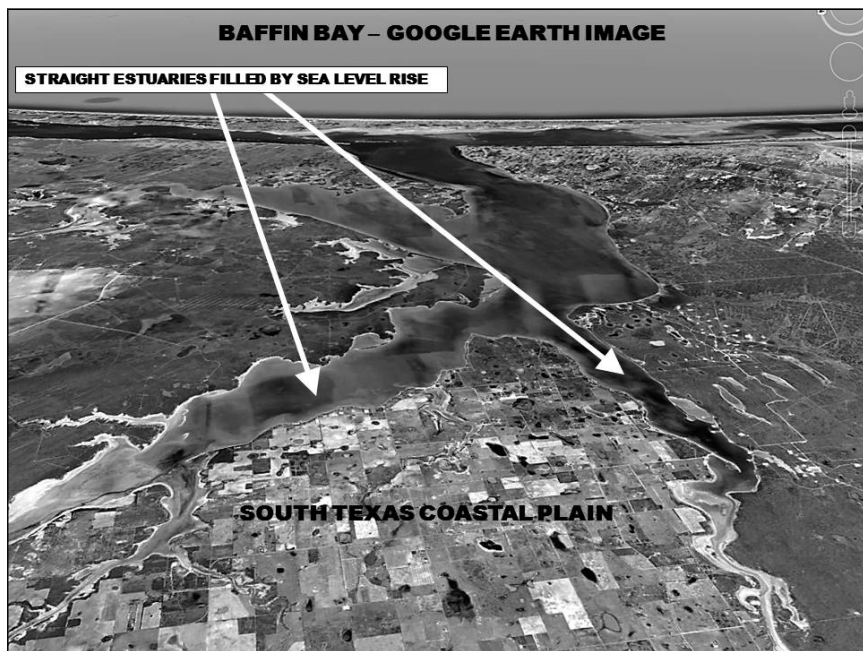
I suppose that the feared alignment of the planets and moon, coupled with a north wind had taken the tide level of the marina down an extra few inches. But those inches were enough to uncover more of the large silt/sand bar that has formed on the backside of the breakwater at the south end of the marina, across from the old Memorial Coliseum site. This “lowstand” exposed the “shelf and upper slope” of the sand bar. I leapt from the truck and dragged my daughter down the steps of the seawall to walk across the largest (and possibly the smelliest) laboratory model of a FSST (falling sea-level/stage systems tract) that I had ever seen.



Corpus Christi Marina on December 21, 2012. Notice how the tide is exceptionally low (actually rising at the time of the photo) exposing the shelf. “Streams” have formed small straight estuaries being inundated as the tide rises.

Exciting things do happen when sea level falls! The lowering of sea level increases the gradient of rivers and streams. Along the coastline, rivers dramatically cut downward and straighten as they rapidly erode the landscape moving sediments into the basin. The retreating sea exposes the muddy shelf and destabilizes the slope sending even more sediment into the abyss. Slope canyons and networks of channels form to transport sediments into the deepest parts of the basin. Landward, streams rapidly erode and dissect the coastal plain. The distinctive fea-

tures of the coastal geomorphology we see today, namely Baffin Bay, Laguna Madre, the Nueces River Valley, and Corpus Christi Bay, are related to the sea relentlessly rising and flooding the eroded landscape formed during the last ice-age lowstand.



Present-day Google Earth image of Baffin Bay, Texas, located south of Corpus Christi. Note how the overall morphology of the coast mimics the small scale marina “model.” Straight estuaries are now inundated by the sea. The continued input of coarse sediment, which is lacking in the marina model, has formed the barrier island system.

On December 21, 2012, Emily and I walked across the scale model of a FSST (and ongoing transgression) and I was able to point out the geomorphologic features as they formed. When we got to my office, I brought up a Google Earth image of Baffin Bay to illustrate better how the flooded estuaries look so much like the exposed bar in the marina. We then talked about sequence stratigraphy and the systems tracts related to sea level oscillations. Most importantly, I was able to share how a deeper understanding of slow geologic processes can be found in stopping for an hour to consider thoughtfully the “causes now in operation.”

“To see a world in a grain of sand, And a heaven in a wild flower,
Hold infinity in the palm of your hand, And eternity in an hour.”
—William Blake, circa 1803, “Auguries of Innocence”



**ENERGY
DRILLING
COMPANY**

**CONTRACT DRILLING
(LAND RIGS ONLY)**

3,000' — 14,000'

**LOUISIANA
EAST TEXAS
MISSISSIPPI-ALABAMA
ARKANSAS**

*Jody Helbling
413 Liberty Rd.
P.O. Box 905
Natchez, MS 39121*

*Matt Brough
Jerry McMichael
(601) 446-5259
FAX (601) 446-8607*

DAVID STURLESE

PETROLEUM & CONSULTING GEOLOGIST
AAPG CPG #5480

(337) 232-1700
FAX (337) 234-0403
david@hunterexpl.com

**DEVELOPING OIL AND GAS PROSPECTS
IN THE GULF COAST**

ETROA

ETROA Resources LLC

Join us in pursuing gulf coast production,
acquisitions and low-risk drilling opportunities.

John C. Ebert
Kevin McVey

128 Northpark Blvd.
Covington, LA 70433
(985) 809-3808

www.etroa.com



KEY **EXPLORATION** **COMPANY**

BILL GUIDRY
President

P.O. Box 52963
Lafayette, Louisiana 70505

Phone 337-233-9445
Fax 337-237-5056
bguidry@keyoperating.com

D. J. Bergeron

INDEPENDENT EXPLORATION GEOLOGIST

*AAPG Certified Petroleum Geologist #5371
SIPES #2141*

704 S. Michot Drive Phone: 337 988-6966
Lafayette, LA 70508 Cell: 337 654-3003
djbergeron@lusfiber.net Fax: 337 988-6966

Hearings

Evaluations

LEON E. COMEAUX
& ASSOCIATES

**GEOLOGICAL & PETROLEUM
CONSULTANTS**

**David W. Comeaux
William S. McAlister, Jr.
Randy McAlister**

P.O. Box 53922 Lafayette, LA 70505
305 La Rue France Lafayette, LA 70508
PHONE: 337-233-9839
FAX: 337-233-2131
lcomeaux@cox-internet.com

OPTIMISTIC OIL COMPANY

FRANK W. HARRISON, JR.
President

200 Audubon Blvd. 1415 Louisiana
P.O. Box 51943 Suite 2400
Lafayette, LA 70505 Houston, TX 77002
Phone (337) 232-4031 Phone (713) 650-8008
Fax (337) 235-5333 Fax (713) 650-8305
E-mail: f.harrison.jr@worldnet.att.net

Space Available

**Contact King Munson at
kingmunson@gmail.com
for more information.**



**PROSPECT GENERATION
AND EVALUATION
BOTH 3D AND 2D SEISMIC**

Phone: (337) 233-8670
Fax: (337) 235-8066
E-mail: sunbelt@sunbeltenergy.com

Steven S. Anderson Consulting Geophysicist

*Landmark & Kingdom 3-D Pak
s_s_and@hotmail.com*

Kinnickinnick Exploration, Inc.

133 South Audubon Street
Lafayette, LA 70503
337-261-0211

Classen Exploration, Inc. ***James S. Classen***

**Interested in close-in prospects
Looking to buy into low risk deals**

P.O. Box 140637 208-854-1037 Ph
Boise, ID 83714 208-854-1029 Fax
klassenllc@msn.com

ALBERT J. TREPAGNIER

PETROLEUM GEOLOGIST

P.O. Box 53607 Phone: (337) 988-6882
Lafayette, LA 70505 Fax : (337) 988-6882

**Crawfish
Leases**



**Hunting
Leases**

**Campsite
Leases**

**Timber
Leases**

ALSO - OIL AND GAS LEASES

**CALL: Debbie Springer
337-288-7668**

W.H. ROBBINS & ASSOCIATES, LLC **CONSULTING GEOLOGISTS**

**W. H. ROBBINS
BILL DALE
REMY WILLIAMS
ARTHUR CHRISTY**

302 LA RUE FRANCE, SUITE 100
LAFAYETTE, LA 70508

OFFICE (337) 232-5004
FAX (337) 232-8271

WELLSITE GEOSCIENCE SERVICES



**When time is money,
Wellsite Geoscience is
money well spent.**

Whether you're exploring a basin, producing a well or completing a shale play, time is money. That's why Weatherford Laboratories brings a suite of formation evaluation technologies right to the wellsite. Utilizing mud gas and cuttings, these technologies provide detailed data on gas composition, organic richness, mineralogy and chemostratigraphy in near real time. As a result, operators now have an invaluable tool to assist with sweet spot identification, wellbore positioning, completion design and hydraulic fracturing. We call it Science At the Wellsite. You'll call it money well spent.

SCIENCE AT THE WELLSITE™
www.weatherfordlabs.com

Formation Evaluation | Well Construction | Completion | Production
©2012 Weatherford. All rights reserved.





D-O-R ENGINEERING, INC.

6161 Perkins Rd., Suite 2C
Baton Rouge, LA 70808
225-765-1914

1023 Harding Street
Lafayette, LA 70503
337-233-2378

**DRILLING - OPERATIONS - RESERVOIR
3-D AND GEOSCIENCE SERVICES**

FUGRO GEOSERVICES, INC.



U.S. and International Services

- Marine Geohazard Surveys
- High Resolution Seismic
- Pipeline Surveys
- AUV Surveys

Don Broussard, Executive Marketing Manager

Adam Jackson, International Marketing

Melissa Wood, Marketing Rep

Melissa Jeansonne, AUV

Jack King, Pipelines

LAFAYETTE
(337) 237-2636

HOUSTON
(713) 369-5800

LGS ADVERTISING

A great way to get exposure for you and your service is by advertising in the LGS Bulletin. For just a few dollars a month, you can make your products and services known to about 400 geoscientists and petroleum related companies. We publish from September through May. Advertising is good for your business and helps support your Society.

Advertisement submission can be in digital format (any number of common formats such as .pdf, .gif, .tif, .jpg, .bmp can be accepted) or in a high-resolution print-out for scanning purposes.

To guarantee publication, please send materials by the 1st of the month directly to the LGS Editor.

ADVERTISEMENT DIMENSIONS & COSTS

1 SPACE (1/16th):	.906" X 2.25"	@ \$100.00/year
2 SPACE (1/8th):	1.812" X 2.25"	@ \$150.00/year
1/4 PAGE AD:	1.812" X 4.5"	@ \$300.00/year
1/2 PAGE AD:	3.625" X 4.5"	@ \$450.00/year
FULL PAGE AD:	7.25" X 4.5"	@ \$600.00/year

A limited number of color advertisement spaces are available as well. Please contact the LGS Editor for more information.

Please send all advertisements and communication (address changes) to the following address:

**Lafayette Geological Society
P.O. Box 51896
Lafayette, LA 70505**

Or, if you prefer, e-mail your file to the editor:

**James Willis
LGSEditor@MSN.COM**

LAFAYETTE GEOLOGICAL SOCIETY, INC.
P.O. BOX 51896, LAFAYETTE, LA 70505
TYPE OR PRINT

Name: _____

E-mail Address: _____

Mail Address: _____
Street or P.O. Box City State Zip

Birthdate: _____ Company: _____

Position in Company: _____ Office Phone: _____

School(s): _____ Grad.Year(s): _____ Degree(s): _____ Major(s): _____

Home Address: _____
Street or P.O. Box City State Zip

Spouse Name: _____ Home Phone: _____

Type AAPG Member: _____ (Student, Associate, Active)

Type Membership Requested in LGS: _____ (Student, Active, Associate)

Type Membership Approved: _____ Date: _____

Dues Amount: _____

Date Dues or Fee Received: _____

Membership Categories - Qualifications - Dues (Payable Yearly in May)

1. Student - Full Time Geology - \$5.00
2. Associate - No Geology Degree - \$20.00
3. Active - Geology Degree - \$20.00
4. Senior - Active who reaches age 60 - NO DUES
5. Honorary Life - Elected by Board (Active) - NO DUES

Each members' involvement in the Society is encouraged and any assistance with the areas below is welcomed. Please indicate if you are interested in serving on one (or more) of the following committees of the Lafayette Geological Society.

LGS Committees

Advertising
Ballots and History
Community Youth Activity
Entertainment
Golf Tournament
Personnel Placement
Program and Publicity
Webmaster

Awards and Nominations
Bulletin
Continuing Education
Field Trip
Mentoring
Photography
Publications

Check payable to:
Lafayette Geological Society, Inc.
P.O. Box 51896
Lafayette, LA 70505

LGS COMMITTEES AND CHAIRPERSONS

ADVERTISING

King Munson 519-0500
Island Energy LLC

AWARDS & NOMINATIONS

Mary Broussard 354-5041
Plains E & P Co.

BALLOTS & HISTORY

Jim Dungan

BARBEQUE

Kelly Poret 521-2059
Stone Energy

BULLETIN

James Willis 277-3652
Odyssey International, LLC

COMMUNITY YOUTH ACTIVITY

Kristie Cornell cornell@louisiana.edu

CONTINUING EDUCATION

Carl Richter 482-5353
UL-Lafayette Geol. Dept.

EDUCATION OUTREACH

Mary Broussard 354-5041
Plains E & P Co.
and

Carl Richter 482-5353
UL-Lafayette Geol. Dept.

ENTERTAINMENT

Vacant

FIELD TRIP

Tim Duex 482-6222
UL-Lafayette Geol. Dept.

GOLF TOURNAMENT

Tim Bennett 962-2916
Bennett Systems LTD

MENTORING

Cathy Bishop 482-0678
UL-Lafayette Geol. Dept.

PHOTOGRAPHY

Samantha Leone
UL-Lafayette Geol. Dept.

PROGRAM & PUBLICITY

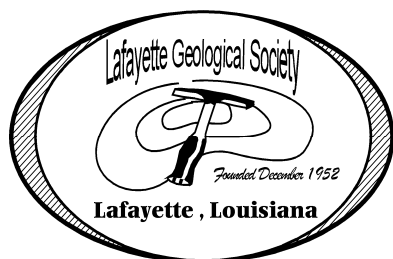
William Hagan 232-5510
Stratagraph

PUBLICATIONS

Victoria Hover 482-1166
UL-Lafayette Geol. Dept.

WEBMASTER

John Boggs jboggs@stratagraph.com
Stratagraph





Founded December 1952

Lafayette Geological Society

P. O. Box 51896

Lafayette, Louisiana

70505

PRSRT STD
U. S. POSTAGE
PAID
Permit No. 195
Lafayette, LA

