

BULLETIN
Corpus Christi
Geological Society



and

Coastal Bend
Geophysical Society



January
2018
ISSN 0739 5620

Compliments of

American Shoreline, Inc.



Specializing in
Oil & Gas Exploration
& Wind Energy

802 N. Carancahua
Frost Bank Plaza, Suite 1250
Corpus Christi, Texas 78401
(361) 888-4496

www.amshore.com



TABLE OF CONTENTS

Officers, Committees and Chairpersons for CCGS/CBGS.....	2 & 3
CCGS/CBGS Joint Calendar of Meetings & Events.....	4 & 5
CCGS & CBGS Membership Report.....	7
CBGS President's Letter.....	9
Luncheon Meeting Announcement for January.....	14
Video Report by Ray Govett (Our Abundant Energy Supply from Concept to Consumption).....	17
CCGS papers available for purchase at the Bureau of Economic Geology.....	32
Geo Link Post.....	33
Type Logs of South Texas Fields.....	34
Order Oil Men DVD.....	35
Wooden Rigs Iron Men.....	36
Professional Directory.....	37



CORPUS CHRISTI GEOLOGICAL SOCIETY

P.O. BOX 1068* C.C. TX. 78403

2017-2018

www.ccgeo.org

OFFICERS

President	Austin Nye	361-452-1435	austin@nyexp.us
President Elect	Frank Cornish	361-883-0923	frank.cornish@gmail.com
Vice President	William Thompson	361-242-3113	william.thompson@rrc.texas.gov
Secretary	Randy Bissell	361-885-0110	randyb@headingtonenergy.com
Treasurer	Casey Mibb	361-726-1092	clmibb@yahoo.com
Past President	Barbara Beynon	361-774-3369	bbeynon77@yahoo.com
Councilor I	Rick Paige	361-884-8824	rickp@suemaur.com
Councilor II	Brent Hopkins	361-884-8824	brent@suemaur.com

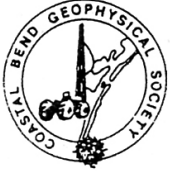
AAPG DELEGATE

EDITORS

Bulletin Editor	Marian Wiedmann	361-855-2542	wiedgulf@gmail.com
Bulletin Tech. Editor	Sebastian Wiedmann	361-946-4430	swiedmann.geo@gmail.com
Web Master	Josh Pollard	361-654-3100	support@interconnect.net

GEOLOGICAL SOCIETY COMMITTEES & CHAIRPERSONS

Advertising/Bus. Cards	Robby Sterett	361-739-5618	robert.sterett@gmail.com
Arrangements	Wes Gisler & Will Graham	830-239-4651 361-885-0110	arrangements@ccgeo.org willg@headingtonenergy.com
Bloodmobile	Mike Lucente	361-883-0923	mikel@impexploration.com
Earth Day	Alan Costello	361-888-4792	acostello@royalcctx.com
Continuing Ed.	Stephen Thomas	361-660-8694	stthomas@spnaturalresources.com
Education	Dawn Bissell	361-960-2151	bissells@swbell.net
Scholarship	J. R. Jones	361-779-0537	jrjones5426@aol.com
Fishing Tournament	Leighton Devine	361-882-8400	ldevine@suemaur.com
History	Ray Govett	361-855-0134	ray30@hotmail.com
Membership	Dorothy Jordan Randy Bissell	361-885-0110 361-885-0113	dorothyj@headington.com randyb@headington.com
Type Logs	Frank Cornish	361-883-0923	frank.cornish@gmail.com
University Liaison	Casey Mibb Wesley Garcia	361-726-1092	clmibb@yahoo.com



COASTAL BEND GEOPHYSICAL SOCIETY
P.O. BOX 2741*C.C. TX. 78403
2017-2018

OFFICERS

President	Dr. Subbarao Yelisetti	361-593-4894	subbarao.yelisetti@tamuk.edu
Vice President	Lonnie Blake	361-883-2831	lonnie_blake@eogresources.com
Secretary/Treasurer	Matt Hammer	361-888-4792	mhammer@royalcctx.com
Golf Chairman	Lonnie Blake	361-883-2831	lonnie_blake@eogresources.com
Scholarship Chairman	Ed Egger	361-947-8400	edegger69@gmail.com
Education	Dr. Robert Schneider	361-593-3589 361-447-2381	Robert.schneider@tamuk.edu

**Visit the geological
web site at
www.ccgeo.org**

CCGS/CBGS JOINT MEETING SCHEDULE 2017-2018

September 2017							October 2017							November 2017						
S	M	T	W	Th	F	S	S	M	T	W	Th	F	S	S	M	T	W	Th	F	S
					1	2	1	2	3	4	5	6	7			1	2	3	4	
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31	26	27	28	29	30						

Monday, Oct. 2, 2017 6:00 pm BBQ Kickoff at Hoegemeyers & Presentation by Carl Tape, Ph.D., Associate Professor of Geophysics, Geophysical Institute, University of Alaska Fairbanks “*Seismology in Alaska: Earthquakes, Bears, & High-Performance Computing.*”
 Oct., 18, 2017 11:30am-1:00pm Speaker: David Mittlefehldt, PhD., Planetary scientists, Astromaterials Research & Exploration Science (ARES), Johnson Space Center, National Aeronautics & Space Administration (NASA) “Mars Exploration Rover Opportunity: Exploring the Rim of Endeavour Crater on Mars, Day-4,841+of a 90-Day Mission.”

11:30 am – 1:00 pm
 Speaker: Eugene L. Ames, Jr.
 “The History of Discovery: The Largest Oil Field in the World & Other Musing by a Geologist & Wildcatter.”

December 2017							January 2018							February 2018						
S	M	T	W	Th	F	S	S	M	T	W	Th	F	S	S	M	T	W	Th	F	S
					1	2	1	2	3	4	5	6					1	2	3	
3	4	5	6	7	8	9	7	8	9	10	11	12	13	4	5	6	7	8	9	10
10	11	12	13	14	15	16	14	15	16	17	18	19	20	11	12	13	14	15	16	17
17	18	19	20	21	22	23	21	22	23	24	25	26	27	18	19	20	21	22	23	24
24	25	26	27	28	29	30	28	29	30	31	25	26	27	28						
31																				

Combined
 November/December for the
 Holidays.

11:30 am – 1:00 pm
 Speaker: Lindsay Roe, Core
 Laboratories “South Texas
 Reservoir Geology
 Presentation,” to be
 Determined

11:30 am – 1:00 pm
 Speaker: Peter Wang,
 Geophysical Technical
 Advisor, Paradigm “A New
 Technique of Lithology and
 Fluid Content Prediction from
 Prestack Data: An Application
 to a Carbonate Reservoir”

CCGS/CBGS Joint Meeting Schedule 2017-2018

March 2018							April 2018							May 2018						
S	M	T	W	Th	F	S	S	M	T	W	Th	F	S	S	M	T	W	Th	F	S
				1	2	3	1	2	3	4	5	6	7			1	2	3	4	5
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
25	26	27	28	29	30	31	29	30						27	28	29	30	31		

11:30 am – 1:00 pm
 Speaker: Collegiate
 Presentations, To be
 determined

11:30 am – 1:00 pm
 Speaker: Phillipe Tissot, Ph.D.,
 Department of Physical &
 Environmental Sciences, TAMUCC
 “Coastal Processes Presentation,”
 to be determined

11:30 am-1:00 pm
 Speaker: To be determined

Calendar of Meetings and Events

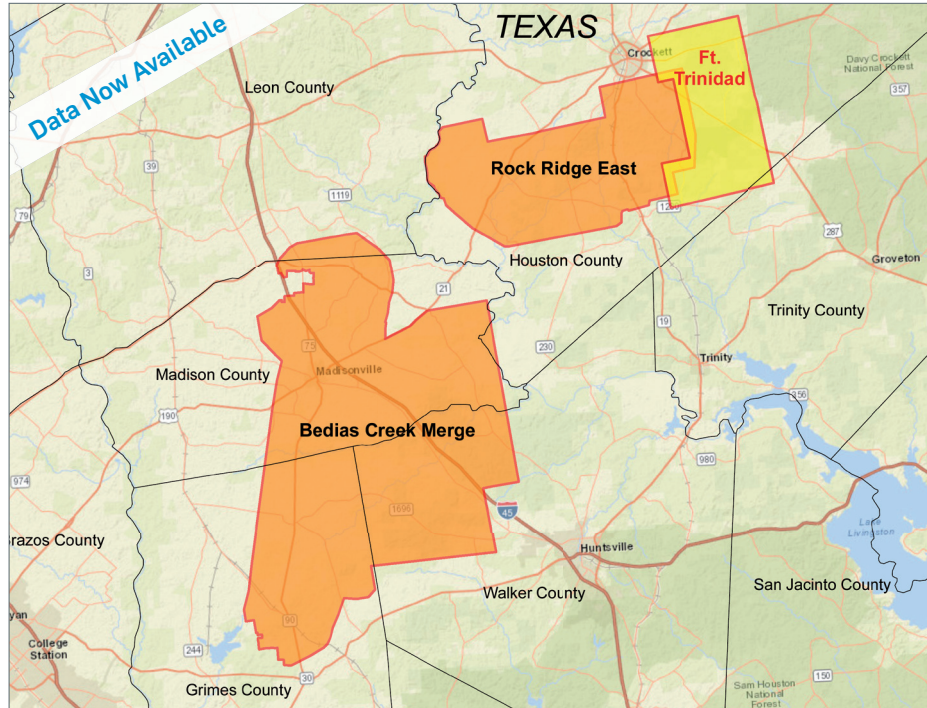
Calendar of Area Monthly Meetings

Corpus Christi Geological/Geophysical Society.....	Third Wed.—11:30a.m.
SIPES Corpus Christi Luncheons.....	Last Tues.—11:30a.m.
South Texas Geological Society Luncheons.....	Second Wed—noon San Antonio
San Antonio Geophysical Society Meetings.....	Fourth Tuesday
Austin Geological Society.....	First Monday
Austin Chapter of SIPES.....	First Thursday
Houston Geological Society Luncheons.....	Last Wednesday
Central Texas Section of Society of Mining, Metallurgy & Exp.....	2 nd Tues every other month in San Antonio



New Ft. Trinidad 3D Survey Houston and Trinity Counties, TX

YOU'VE ARRIVED



CGG continues to expand its East Texas footprint with high-quality 3D projects while illuminating the stacked pay formations.

Data is already available from our Bedias Creek Merge and Rock Ridge East projects. Orthorhombic PSTM from our newest project Ft. Trinidad is also now available.

The right data, in the right place, at the right time

Scott Tinley
☎ +1 832 351 8544
✉ scott.tinley@cgg.com

Cheryl Oxsheer
☎ +1 832 351 8463
✉ cheryl.oxsheer@cgg.com



cgg.com/ROP





CCGS & CBGS Membership Report

Each year, our Society undertakes an effort to renew the membership rolls using a big August mailout. We tend to try to reach between 400-500 current and former members to solicit renewal. *Why former members?* We go back a few years to past members because we understand how things can easily lapse or be missed. Our mailout allows members to renew in the CCGS and/or the CBGS. It also facilitates contributions to several funds to support geoscience education.

How are we doing? To be honest, the CCGS and CBGS face the same issues as almost every other professional and social organization in the US, a long-term trending decline in membership. It is well established in social research that post-WWII generations, including the Baby Boomers, were “joiners.” Rotarians, Elks, Moose, Knights of Columbus, SIPES, SPWLA, AAPG, CCGS, on and on benefitted.

In the 50’s through the 90’s, societal membership was the mainstay of a professional, religious, and social life. Communication meant talking with and meeting with people of the same field, faith, and societal aspiration. Today, communication connotes something different. No longer *must* people **actually** meet to exchange ideas – they can **virtually** meet. The younger generations have grown to work in a different professional, religious, and social system. They pick the time and place and limits for interaction. Meeting is not required (or not desired). It’s not right or wrong, but it’s certainly different.

The other reality is the decline in the geoscience profession in our region. Corpus Christi is a great place to live – but it can be a difficult place to sustain work in geoscience. As a place to work in geology, we’ve seen job migrations to San Antonio, Austin, Midland, and Houston. There are few entry-level positions here for professional geoscientists and some internships. These are quickly filled by young people.

So, fewer local jobs and less social incentives are the general drivers for declining membership. Add to that, “natural” attrition and we decline in our baseline members about 8-10% per year.

As of December 21, here are our renewal numbers for the **2017-18 Society Year**.

- The CCGS has 176 paid members, 4 honorary members, and 3 complimentary members on roll.
- The CBGS has 57 paid members and 1 honorary member (some have not sent in renewals) on roll.
- There are 45 student members on roll; each is claimed by both Societies as a student member.
- We have collected almost \$6000 in dues for both Societies.
- \$1350 has been donated for the CCGS Scholarships, \$100 for CBGS Scholarship.
- Other Society Funds have received about \$1000.

Despite the challenges of declining membership, both of our Societies are very healthy in terms of leadership, fiscal responsibility, and function. Please continue to support our Societies. I hope this is a reminder if you have not yet renewed to do so.

Best of luck and prosperity in the New Year!

Respectfully submitted - Randy Bissell (Thanks to Dorothy Jordan and Erin Matthys for their help)

JOIN!



The Desk & Derrick Club of Corpus Christi is a dynamic organization that promotes the education of the petroleum, energy and allied industries and advances the professional

Member Benefits:

- Learn from energy industry experts.
- Network with energy industry leaders and colleagues.
- Attend regional and national meetings.
- Receive critical updates and information about the energy industry.
- Enhance communication and leadership skills.
- Make friends for life!

For more information about the Desk & Derrick Club of Corpus Christi and to learn about member eligibility, go to www.addc.org or contact Jena Nelson at 361-844-6726 or email at jena@amshore.com

The Desk & Derrick Club of Corpus Christi is a proud affiliate of the Association of Desk And Derrick Clubs, www.addc.org



CBGS President's Letter

CBGS Scholarships

The board awarded two scholarships of \$2,000 each to undergraduate geophysics majors from Texas A&M University-College Station, and University of Houston. Another scholarship of similar value will be given to geophysics major from Texas A&M University-Kingsville in Spring 2018.

The following criteria is followed in awarding the scholarships.

1. Must be a citizen of the USA
2. Must have declared Major Geophysics at the main campus of the receiving university
3. Must have GPA 3.0
4. Must be in good standing with the school
5. Must make effort to attend a Coastal Bend Geophysical Society Meeting in Corpus Christi Texas after being awarded a scholarship to be recognized by the society.

Dr. Subbarao Yelisetti- President
Lonnie Blake- Vice President
Matt Hammer- Secretary/ Treasurer
Dr. Robert Schneider- Continuing Education
Lonnie Blake- Golf Chair
Ed Egger- Scholarship Chair

News

- At the time of writing this report, U.S. crude futures have averaged over \$50 a barrel in 2017, as opposed to an average of \$43.47 a barrel in 2016. This is expected to rise to \$56 and \$54 a barrel in 2018 and 2019, respectively as reported by Scott DiSavino on reuters.com.
- According to Baker Hughes, the average number of rigs in service so far in 2017 was 874 in contrast to 509 in 2016 and 978 in 2015.

- According to a federal energy projection in December, U.S. production is expected to rise to 9.2 million bpd in 2017 as against 8.9 million bpd in 2016. This is expected to increase to an all-time high of 10.0 million bpd in 2018.

CBGS Business

CBGS currently has 56 members.

CBGS offered Basic Seismic Attributes course on 28th April, 2017 in EOG conference center in Corpus Christi and is looking forward to offer many such courses or workshops. Topic/speaker suggestions are welcome. Email your suggestions to Subbarao.Yelisetti@tamuk.edu or Lonnie_Blake@eogresources.com

Golf Tournament

CBGS organized its annual **Golf Tournament** to fund its scholarship program on October 6, 2017 at Northshore Country Club.

20 Players, 10 sponsors, 7 contributing cash, 3 contributing golf balls, coolers, etc.....

Raised \$1951 for the scholarship fund.

If you are interested in the Golf Tournament, please contact Lonnie Blake at 361-887-2665 or Lonnie_Blake@eogresources.com

New Degree Tracks

BS degree in Geophysics, Minor in Geophysics and Certification in Geophysics offered at Texas A&M University-Kingsville from Fall 2017.

Please contact Dr. Subbarao Yelisetti (Subbarao.Yelisetti@tamuk.edu) or

Dr. Robert Schneider (Robert.Schneider@tamuk.edu) for additional information.

Seismology class

TAMUK will offer GEOL 4375/PHYS 5385-Seismology grad/undergrad stacked class on Tuesday and Thursday from 3:30-4:15 pm in Spring 2018. This is available for the professional community as well as our students. You can sign up as a “transient” student in order to take classes without actually enrolling in the school. If anyone in the professional community wishes to sign up for this, please contact the instructor, Dr. Subbarao Yelisetti Subbarao.Yelisetti@tamuk.edu

SEG Distinguished Lecture

CBGS and TAMUK SEG student chapter will be organizing 2018 SEG Distinguished Lecture in January, 2018.

Topic: Advanced imaging for practitioners

Speaker: William W. Symes, Rice University, Houston, TX USA

Venues:

Department of Physics and Geosciences, **Texas A&M University-Kingsville**, on **24th January**, Wednesday, **3:00-4:00 pm**

EOG Resources, Corpus Christi on **25th January**, Thursday, at **noon**.

Contact: Subbarao.Yelisetti@tamuk.edu or Lonnie_Blake@eogresources.com

See <https://seg.org/Education/Lectures/Distinguished-Lectures/2018-DL-Symes> for additional details.

Education/Events

-SEG

See <https://seg.org/Education/Lectures/Distinguished-Lectures/2018-DL-Symes> for information about upcoming SEG distinguished lecture in Houston and other locations.

See <http://seg.org/Education/Lectures/Honorary-Lectures/2017-HL-van-der-Baan> for SEG honorary lecture locations in Texas. Topic is human-induced seismicity.

-AGU

AGU fall meeting in New Orleans, December 11th-15th.

See <https://agu.confex.com/agu/fm17/preliminaryview.cgi/programs.html> for sessions and program information.

-GSH

Below is a weblink for registration for the January 23-26, 2018 four half-day webinars presented by Mike Graul and Fred Hilterman "**Seismic Amplitude 20/20: An Update and Forecast**" sponsored by the Geophysical Society of Houston and the SEG. Note that CBGS gets 10% of fees that come through CBGS.

https://www.gshtx.org/SharedContent/Events/Event_Display.aspx?EventKey=8906b6ec-a66b-4483-9f16-9eff670aa317

Webinar Pricing	Per Person
Individual Registration	\$390
Company/Group 2-10	\$325
Company/Group 11+	\$295
Individual Student	\$100
Student Group	\$60

Monthly Saying

"Omnia bona quoad perfora" - loosely translated as "All prospects look good until drilled" - motto used by Anadarko in 1994 following their sub-salt drilling in the Gulf of Mexico.

Monthly Summary

Texas Oil and Gas Info	Current Month	Last Month	Difference	
Texas Production	MMBO/BCF	MMBO/BCF	MMBO/BCF	
Oil	87.2	93.9	-6.7	August
Condensate	8.6	10.0	-1.4	August
Gas	616.0	633.4	-17.4	August
	Current Month	Yr to date - 2017	Yr to date - 2016	
Texas Drilling Permits	1187	11715	7104	November
Oil wells	358	3008	1985	November
Gas wells	66	655	372	November
Oil and Gas wells	682	7301	4307	November
Other	24	179	111	November
Total Completions	492	6291	9923	November
Oil Completions	388	4880	7383	November
Gas Completions	74	942	2036	November
New Field Discoveries	1	27	20	November
Other	1	19	50	November

Subbarao Yelisetti
President, CBGS

SPONSORS



**USE PROMO CODE - CCGSTRIDE
FOR \$5.00 OFF YOUR FIRST RIDE.**

**DOWNLOAD THE TRIDE
PASSENGER APP TODAY!**

GET IT ON
 **Google Play**

 Download on the
App Store

RIDETRIDE.COM

STALKER ENERGY, L.P.

Austin Office:

1717 W. 6th Street, Ste 230

Austin, Texas 78703

512.457.8711

Contact: Bill Walker, Jr.

bwalker@stalkerenergy.com

Houston Office:

2001 Kirby Drive, Suite 950

Houston, Texas 77019

713.522.2733

Contact: Todd Sinex

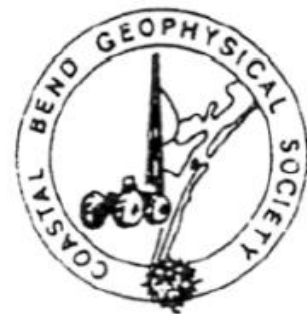
tsinex@stalkerenergy.com

www.stalkerenergy.com





CORPUS CHRISTI GEOLOGICAL SOCIETY
COASTAL BEND GEOPHYSICAL SOCIETY



LUNCHEON MEETING ANNOUNCEMENT

JANUARY 17, 2018

-
- Location:** Congressman Solomon P. Ortiz International Center, 402 Harbor Drive, Corpus Christi, TX 78401 ortizcenter.com
- Student Sponsor:** Imagine Resources, Nye Exploration, Viper Exploration, Ltd.
- Bar Sponsor:** *SPONSORSHIP OPPORTUNITIES AVAILABLE!!!*
- Time:** 11:30 am Bar, Lunch follows at 11:45 am, Speaker at 12:00 pm
- Cost:** \$25.00 (additional \$10.00 surcharge without reservation; No-shows may be billed and non-RSVP attendees cannot be guaranteed a lunch); **FREE** for students with reservation (discounted by our generous sponsors)!
- Reservations:** Please **RSVP** by 4PM on the FRIDAY before the meeting!
E-Mail: arrangements@ccgeo.org

Please note that luncheon RSVPs are a commitment to the Ortiz Center and must be paid even if you can't attend the luncheon.

**SPONSORSHIPS OPPORTUNITIES ARE AVAILABLE!
IF YOU WOULD LIKE TO SPONSOR, PLEASE CONTACT US AT:
arrangements@ccgeo.org**

Imagine Resources, LLC

NYE
Exploration & Production, LLC



802 N. Carancahua, Suite 1840
Frost Bank Plaza
Corpus Christi, TX 78401
www.nyexp.us

**VIPER
EXPLORATION,
LTD.**

South Texas Reservoir Geology


Presented by:

Lindsay Roe

Core Laboratories



SPONSORS



Nueces Energy, Inc.
P.O. Box 252
Corpus Christi, Texas 78403
Office: (361) 884-0435
Fax: (361)-654-1436
www.nuecesland.com

Nueces Energy, Inc. is a complete land services company in the business of providing professional landmen and project management to various energy related jobs primarily in the oil and gas industry.

With over 30 years of industry experience, we specialize in determining surface and subsurface ownership and negotiating and acquiring contracts, rights of way agreements, and easements to provide our clients with the legal right to explore and develop oil and gas resources. We provide a full service land company capable of managing any project no matter how large or small.



THUNDER EXPLORATION, INC.

Celebrating 30+ years of prospect generation and exploration in the following South Texas plays and trends.

Frio	San Miguel	Edwards
Jackson	Austin Chalk	Pearsall
Yegua	Eagle Ford	Sligo
Wilcox	Buda	Cotton Valley
Olmos	Georgetown	Smackover

Thunder is currently seeking non-operated working interest participation in projects and prospects.

Contact **Walter S. Light Jr.**
President/Geologist
 713.823.8288
 EMAIL: wthunderx@aol.com

Headington Oil Company is now...



HEADINGTON
 ENERGY PARTNERS, LLC

Proudly operating in South Texas.

For more information contact:
Randy Bissell, randyb@headingtonenergy.com or call 361-885-0113



Offices in Corpus Christi, Sarita, and McKinney, Texas - Exploring and Developing properties
 In South Texas, Permian Basin, East Texas & Oklahoma

OUR ABUNDANT ENERGY SUPPLY

FROM CONCEPT TO CONSUMPTION

Video Report by Ray Govett

The object of this project by the Corpus Christi Geological Society is to produce a video showing how oil and gas gets from the field to the consumer. Cooperation of explorers, drillers, pipelines, midstream producers, refiners, and marketers is needed to complete the project. The Corpus Christi Geological Society will interview workers in all stages of the process. The interviews will be recorded and a video telling the story made from the videos. In order to accomplish the objective all phases of the industry will need to cooperate with the Society. Most members of the Society are involved in part of the exploration.

This video will be on public television and in schools around the United States. The video will be shown in several parts.

The Corpus Christi Geological Society worked with Quadrant Productions to produce the History video, which has been shown at several public television stations, a Change in Shoreline video, which the local Public Television Station has and is waiting to show,

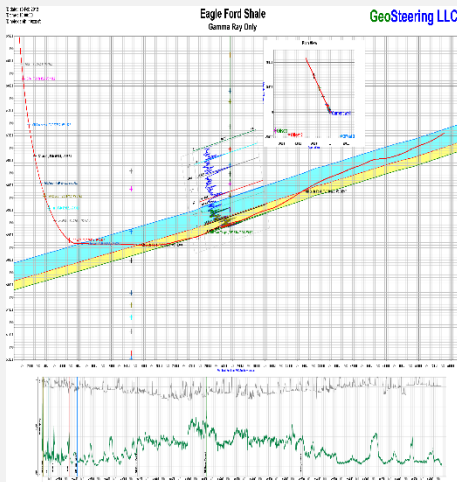
Almost all oil and gas found is the result of somebody's idea. A few promoters found oil and gas by promoting drilling of wells based on the fact they owned the acreage and convinced those with money to invest with them. Early Texas oil and gas wells resulted from wells drilled in search of water, which at the time was more valuable than oil and gas. However, most current exploration for oil and gas is a result of someone's idea about where hydrocarbons may be found based on studying a great deal of data.

The geologist uses publications, surface geology, well logs, sample logs, well cores, aerial photographs, satellite photography, topographic maps, gravity maps, geomagnetic maps and about everything available to come up with an idea about where hydrocarbons may be in the subsurface. Depending on circumstances and available finances the geologist will then work with a geophysicist to further refine the prospect, and a land man to purchase acreage on the prospect.

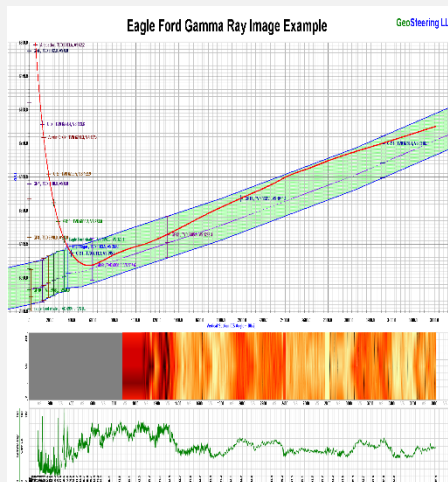
If the area is one with little or no previous exploration, the least expensive way to start is a study of all available pertinent publications on the area followed by an examination of outcropping rock formations. If these rocks look favorable, then airborne or ground gravity and magnetic surveys of the basin may be done. These surveys will tell the geologist and geophysicist the depth of sedimentary rock in the basin and give an indication of possible structures. Assuming things look favorable after these surveys, 2D seismic lines may be run over structures indicated from the gravity and magnetic surveys. 3D seismic lines then might be run to select an optimum drill sight.

Geosteering in the USA and Internationally since 2002

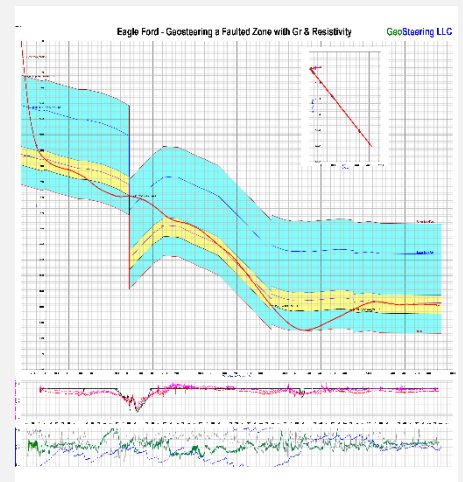
Steering with GR



Steering with Images



Steering with Resistivity



Experience in Texas

Austin Chalk, Barnett, Buda, Caddo, Devonian, Eaglebine / Woodbine, Eagle Ford, Georgetown, Granite Wash, Permian (Delaware, Midland), Smithwick

All sedimentary basins in the United States have been pretty well tested and those producing hydrocarbons have a great deal of data available, which a geologist may work in search of a new discovery for hydrocarbons. A typical geologist will spend hours studying well logs, scout cards and drawing geologic maps looking for new places to drill for hydrocarbons. The new prospect may be a new geographic area or a deeper formation.

Drillers kept track of formations by sample logs before the invention of electric logs. The first drilling rigs were cable tool rigs that brought samples back to the surface every few feet, and a rig crew member would examine the samples to see what formation had been drilled and if it had any show of oil. When rotary rigs began to be used, the process was continued but varied a little. The drilling fluid returned over a shaker that allowed some of the formation fragments to be collected and examined much the same way the cable tool driller had examined his samples.

Invention of the electric log did not eliminate the need for collecting drilling samples. The electric log became another valuable tool in analyzing what is in the subsurface. Mud logging, where the drilling mud is analyzed for gas content and a sample log constructed from analysis of well cuttings are still valuable exploration and well evaluation tools.

After the geologist has selected what he believes to be the best drill sight, a geophysicist may be consulted to analyze the area in more detail. Seismic surveys are done by generating shock waves at or near the surface of the ground. These shock waves travel into the subsurface and are reflected back to the surface by rock formations more dense than other formations. The reflected shock waves are picked up by geophones and transmitted to a recording truck. By measuring the time these shock waves travel to the rock formations and back to the surface, it is possible to map rock formations at depths from which the shock waves are reflected. Subsurface faults and other anomalies will also reflect the shock waves, and by studying these reflections the geophysicist can map the subsurface in greater detail.

Dynamite was used as an energy source to create shock waves in early seismic work and is still used. A method known as a, "Thumper," where a heavy weight is lifted up and dropped is used as an energy source to create the shock wave in some seismic work. The predominant method now in use is probably the, "Vibroseis," where a big vibrator is mounted under a large truck and the vibrator creates the shock wave. A sonic source may be used to create the shock wave in off shore seismic exploration.

2D geophones are laid out predominantly in two directions. 3D geophones are laid out in four directions. The geophones are closely spaced in the 3D seismic surveys, and as a result more subsurface detail is collected at the surface.

A land man may be asked to purchase leases on the prospect prior or after the seismic work. Land man is a generic term and both men and women do the job. A typical procedure is for a land man to purchase a, "Shooting option," on all of the acreage in which the company may

SPONSORS

CHARGER EXPLORATION

Michael L. Jones
President/Geologist

Onshore Gulf Coast Prospect Generation and Consulting

1001 McKinney Street, Suite 801 Houston, TX 77002
Ofc: 713.654.0080 Cell: 713.398.3091
Email: mjones@chargerexploration.com
www.chargerexploration.com

Serving Corpus Christi for over 20 years



- We process 1st class mail with a direct discount to you
- No meter procedure change except for the amount you meter your envelopes

CALL 888-4332 for details - Ask for Anne

That old gas kick could be your next discovery!

Characterization of Unconventional Reservoirs

Traditional methods of core analysis cannot yield acceptable results when applied to unconventional reservoirs such as gas shales, tight gas sands, coals and thin bed formations.

Production controls on these reservoirs are not limited to hydrocarbons in place, permeability and porosity. Pay identification requires an understanding of complex lithologies and exotic mineralogies.

Only Core Lab offers the comprehensive range of unique technologies required to optimize your unconventional reservoirs.

Geological Petrophysical Geomechanical Geochemical



To learn more about our unique unconventional reservoir evaluation services contact Core Lab. (713) 328-2121 or (361) 289-5457 psinfo@corelab.com

© 2005 Core Laboratories. All rights reserved.

think it will do seismic. With the, "Shooting option," the company will agree to pay so much to do the seismic work and for any acreage it wishes to lease after doing the seismic work.

If there is no shooting option under which the acreage is acquired, a land man will need to contact all land owners and mineral interest owners to try to acquire an oil and gas lease. The entity owning the surface of the land does not always own the mineral interest under the land. When ownership of the mineral interest has been separated from ownership of the surface interest, it often makes leasing of the mineral interest more difficult and operations more difficult when production is established. These are just some of the problems land men find when trying to secure oil and gas leases.

Once the oil and gas leases have been obtained, petroleum engineers begin the process of developing a drilling program to test the prospect. Nearby well logs and scout tickets from those wells are examined to determine surface casing requirements, possible over pressured zones that might be encountered while drilling, and other information that might be obtained from examining well records of nearby wells. Information from nearby wells will be used to develop a drilling program for the prospect well. The Railroad Commission has the ultimate say on surface casing requirements in Texas, but the operator is required to make a request for the depth at which surface casing is to be set to protect fresh water in the area.

If the prospect is an ordinary straight hole, the Railroad Commission will tell the operator to set the surface casing to a certain depth. Under some circumstances the Railroad Commission may allow the operator to set a given amount of surface casing and cement the production casing all the way back to the surface. Some wells may require intermediate casing, where formation pressures are such that total depth of the well cannot be reached without drilling mud weights that would cause mud to be lost in shallower formations. There are a great many factors that need to be considered prior to beginning to drill a well.

Directional wells such as so called, "horizontal wells," drilled for shale development require additional requirements. Development of the polycrystalline diamond compact drill bits helped make drilling for shale production possible. The old rotary style drill bits could not be left in the hole long enough, and the uneven wear on the down side of the roller bit did not work very well in a horizontal hole. Logging while drilling and measurement while drilling are other new tools used in horizontal drilling. These two tools let the driller know within a few feet of where the bit is in the subsurface, and in what formation the bit is drilling. All of these new features are expensive and without a high price for oil and gas; horizontal drilling for shale production would not be economical. One advantage that slightly reduces the cost of shale development is the fact that more than one well can be drilled from one surface location.

Early wells were completed in the open hole. The well was drilled to the producing formation and casing set above the producing formation. It was determined most wells performed better when casing was run through the producing formation, cemented in the well and perforated to



CONGRESSMAN
SOLOMON P.
ORTIZ
INTERNATIONAL
CENTER



THE ORTIZ CENTER

The Ortiz Center, managed by Spectra, is a unique venue that hosts a wide variety of events. From weddings and private parties, to business meetings, trade shows and fundraisers, we can accommodate it all. Our on-site full service catering offers a variety of menu options, sure to impress you and your guests.



GREAT FOR

- Meetings
- Trainings + Seminars
- Tradeshows + Job Fairs
- Fundraisers
- Luncheons
- Galas
- Weddings
- Quinceaneras
- Holiday Parties
- Corporate Events

Webex and teleconferencing services now available.

The Ortiz Center - www.ortizcenter.com ■ 361-879-0125 ■ Corpus Christi, TX

PROFESSIONALLY MANAGED BY



allow the hydrocarbons to flow into the well bore. Slotted casing was probably used before perforating guns were used. A welder would cut slits in the casing and hope the slits line up with the producing formation when it was run into the well. The first perforating guns used simple bullets, which left debris in the formation. After World War II, shape charges were used to perforate the casing, which left little debris in the well bore or the formation.

A form of fracing was used in some of the open hole completion wells when a process called, "Shooting," was used. A charge of nitro glycerin was lowered into the well and when it was opposite what was thought to be the producing formation, a triggering mechanism was dropped, causing the nitro glycerin to explode and breaking up the face of the rock formation near the well bore. Halliburton developed a process of cementing casing in the well and the casing could be permanently set at an exact depth by cementing it.

Concerns have been expressed about fracing shale and other wells. Electric logs are now run in almost all wells. Casing is run in the well prior to fracing. The casing is cemented in the well and a cement bond log is run to make sure the cement adequately covers the zone to be fraced and zones above and below the zone to be fraced. If something happened and cement did not go as planned, the well may be perforated and cement squeezed above or below to ensure frac fluid stays in the intended formations. Tracers are frequently used in the frac fluid to check where it goes. The fracing process is monitored closely and if anything abnormal develops it is immediately stopped. Hydraulic fracturing is simply forcing liquid into the subsurface formation under high pressure to create fractures in the producing formation and placing sand in the created fractures to hold them open so the hydrocarbons may more easily flow into the well bore. The process has been in use for many years in the oil industry.

Produced products have to be moved to a market once production is established. Oil production requires building lease storage tanks and gas production requires gas pipelines that end up at a market. If an oil pipeline is nearby, a better price can normally be had for the oil if it is marketed through the pipeline avoiding trucking charges. Oil lease storage facilities need to be built regardless. The oil storage tanks may be bolted steel tanks or welded steel tanks. Smaller tanks may be assembled off location and trucked to the location, but larger tanks are assembled at the location whether they are bolted or welded. If the oil is trucked, probably more storage will be required than if marketed by pipeline. The storage requires the tanks to be built within a retaining wall that will contain more than the capacity of the storage tank, or tanks, within the retaining wall. The retaining wall will need drainage valves to allow for removal of rain water accumulation.

Gas pipelines may need to be built some distance to a market and it may take several gas wells to make the pipeline economical. For this reason, most leases have shut in royalty clauses where the royalty owner is paid so much although the well is not being produced. Oil wells often produce gas with the oil and regulations generally require that gas also be moved to a market.

SPONSORS



SEI®

YOUR
Full Service
National
Seismic Data
Marketing Firm

Seismic Exchange, Inc.

Strategic Speculative Surveys
Geophysical Data Marketing & Management

Corpus Marketing Contact
Lana Lipinski
llipinski@seismicexchange.com

DALLAS DENVER HOUSTON NEW ORLEANS TULSA
4805 Westway Park Blvd., Houston, Texas 77041 832.590.5100

www.seismicexchange.com



VirTex Operating Company, Inc.

615 North Upper Broadway, Suite 525, Corpus Christi, Texas 78477
(361) 882-3046

There are two types of pipelines, common carrier pipelines and more or less private pipelines. Common carrier pipelines carry products of multiple producers and are regulated by the government. Private pipelines are regulated but in a different manner. When a lease is negotiated, it normally provides for construction of a pipeline to move the products within the lease by pipeline. If it is necessary to move those products off the lease by pipeline, separate right of way will be required for that pipeline. All transcontinental pipelines are common carriers, as are many local ones. Common carrier pipelines carry products of multiple producers and may carry those products to a market or to another common carrier pipeline. If the pipeline off the lease is a common carrier, the owner will try to negotiate a right of way with the land owner for the pipeline. If the common carrier pipeline owner is not successful in negotiating a right of way, the pipeline owner may go to court and exercise what is called eminent domain to require the landowner to grant the pipeline a right of way for a fee commensurate with that paid by nearby landowners. A private pipeline may not use eminent domain to obtain pipeline right of way but must deal with each landowner individually.

Gas pipelines cover the United States providing natural gas to almost all homes and markets. Cities and private companies purchase natural gas from the pipelines and distribute it through their own systems to homes, factories and industries. The pipeline companies frequently do not own the gas; they simply transport it for a fee. Natural gas may be compressed and moved by trucks, boats or other surface methods, but the only practical way to move large quantities of gas is through pipelines.

Oil may be trucked, moved on rail cars or by pipelines, but the least expensive and safest way to move oil is by pipelines. Gas pipelines need periodic compressor stations to move the gas long distances and oil pipelines need pump stations. These facilities are normally placed away from populated areas.

With the exception of a few very short lease pipelines, pipelines require heavy equipment while they are being constructed. Trucks or rail cars haul the pipe to a location and then trucks distribute the pipe along the pipeline right of way which has been determined by a surveyor. A ditching machine digs a ditch in which to bury the pipeline that is sufficiently deep to avoid contact with plows or other surface uses of the land. Welders then weld each joint of pipe together. The welds and pipe are inspected by X-Ray to make sure there are no leaks. After inspection of the welds and pipe, it is coated and wrapped to try to prevent rust and deterioration prior to burying. The pipeline is lifted into the trench with special handling equipment that does not damage the coating. Where pipelines cross under roads they are placed inside another pipeline so if a leak should develop, whatever is leaking will be noticeable beyond the highway and the leaking pipe can be removed and repaired not to cause damage to the highway. Boring machines are now used to drill a hole under highways, so the road surface is not disturbed.

Plants to extract natural gas liquid, butane and propane, are normally built along gas pipelines. They may be part of a compressor station or free standing. If a sufficient quantity of gas is

sponsors



Winn Exploration Co., Inc.

Actively Seeking High Quality
Drilling Prospects

Contacts:

Mike Layman (Geophysicist)	361-844-6922
Tom Winn (Geologist)	361-844-6992
Southern Winn (Geologist)	361-844-6998

800 North Shoreline Blvd.
19th Floor, North Tower
Corpus Christi, Texas 78401

Office: 361-844-6900 Fax: 361-844-6901

SUEMAUR

Experience. Expertise. Exploration.

EXPLORING SINCE 1968



539 N Carancahua St, Suite 1100, Corpus Christi, TX 78401

(361) 884-8824

www.suemaaur.com

available on a lease, a plant may be built on the lease to extract butane and propane before the gas enters the pipeline on the way to a market. Butane and propane are used as a replacement for natural gas in areas where natural gas is not readily available. Butane, Propane and compressed natural gas may also be used as fuel in trucks, tractors and other motor vehicles

Numerous products are made from oil and natural gas. Plastics, fertilizer, cosmetics, fabrics, tires, butane and propane are just a few. An object of this project is to show the audience all of the valuable products produced from oil and natural gas

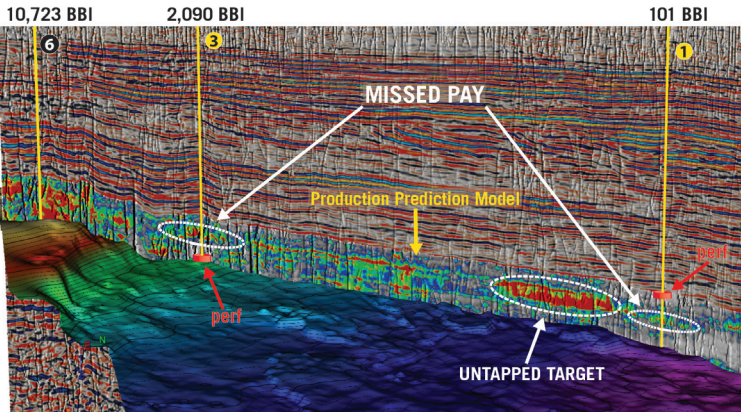
Oil pipelines either terminate at refineries, oil storage areas, or at oil tanker loading facilities at some port. Very little U. S. oil is exported, but large amounts are imported from around the world. Mexico and Canada are the largest foreign suppliers of oil to the United States. Incidence, such as threats to shut down the Suez Canal do not affect the supply of oil to the U. S., but they do affect the price because prices in the U. S. are largely determined by world prices. Oil refineries also consume large quantities of natural gas in processing the oil.

Oil refining is a complicated operation. Crude oil is stored at the refinery so the process may operate continuously over an extended period of time without interruption. The crude oil first enters the distillation tower where heat is applied to begin the process of producing a variety of end products. Heavier products like petroleum coke and asphalt base will be bled off of the distillation column, and remaining hydrocarbon products will enter a cracking unit or a coker to be further refined. Heavier products coming out of the coker may be lubricating oil, industrial fuel, jet fuel and diesel fuel. Lighter components coming from the cracking unit are motor gasoline and liquefied petroleum gas. Diesel fuel, jet fuel, gasoline, and liquefied petroleum gas may also be produced as lighter products in the distillation tower. The gasoline may be further processed in a reformer. Naptha may also be produced as a very light product in the reformer or the distillation tower. Nothing is wasted in the refining process. All of the components of crude oil are used some place. Gasoline, diesel fuel and jet fuel are just the primary products produced from a barrel of oil.

A high percentage of these three products reenter pipelines when they leave the refineries for distribution. Some is trucked to local markets and some is shipped by tankers to distant markets, but the majority is moved to markets by pipelines. Some refined products are imported, but the majority of refined products are produced in the United States. Gasoline is shipped to tank farms where it is stored until picked up and trucked to stations by wholesalers known as, "Jobbers." Jet fuel is shipped to airports where it is stored and trucked directly to airplanes by suppliers at the airport. Refined oil may be packaged at the refinery or delivered to a plant where it is packaged for distribution.

Gasoline is sold through company owned and independently owned stations. The gasoline may bear the name of the refiner or the marketer. When buying gasoline, it is difficult to know where or who refined the gasoline or where the oil was produced. There are independent refiners as

SEISMIC-BASED ANALYTICS



An arbitrary line through 3 vertical wells in the West Texas Permian Basin shows the lateral variations of the Production Prediction Model and reveals refrac potential for Wells 1 and 3 where the red disks indicate the actual completion intervals and the white circles highlight the missed pay. Note the untapped target near Well 1.

In today's challenging market, no one can afford a bad well. Global's seismic-based analytics can help you avoid the pitfalls and pinpoint the sweet spots. By integrating seismic, geological, and engineering data, this proprietary workflow identifies the most prospective areas and zones for drilling - down to the stage level! This reduces risk, optimizes spend, and greatly increases the chance for every well and stage to be a winner.

- High-grade prospective drilling areas and zones
- Enhance well planning and geosteering
- Optimize completion placements and frac design
- Predict well performance at stage level
- Boost EUR of individual wells
- Identify candidates for refrac

Global's **SEISMIC-BASED ANALYTICS** approach is field-proven with successful projects in both conventional and unconventional reservoirs. Contact us today to find out how Global can help you make every well a winner.

FIND WHAT YOU'VE BEEN MISSING

For More Information:
www.globalgeophysical.com/ANALYTICS or
Contact ANALYTICS@globalgeophysical.com



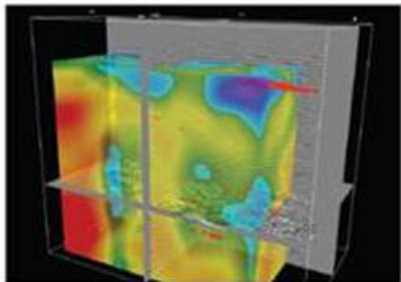
well as major company refineries and when buying gasoline at a service station or convenience store, it is difficult to know where it was refined or where the oil was produced.

When oil goes through the refinery, it is all mixed together and when gasoline goes to the retailer, it is frequently from more than one refiner. The jobber buys his gasoline where he gets the best price at the time he buys it and mixes it with what is on hand. When it is delivered, it is delivered from storage.

This is a brief outline of the object of the video being made by the Corpus Christi Geological Society.

SEIMAXSM
TECHNOLOGIES

Innovative Seismic
Processing Solutions



**2D and 3D Land and Marine
Pre-Stack Time and Depth Imaging**

**Pre- and Post-Stack Attributes
for Amplitude, Frequency and
Resolution**

4805 Westway Park Blvd. Houston, TX 77041
p: 832.554.4301 www.seimaxtech.com



SABALO ENERGY

SABALO ENERGY | P.O. BOX 2907 | CORPUS CHRISTI, TX 78403 | 361.888.7708 | SABALOENERGY.COM

Corpus Christi Geological Society Papers available for purchase at the Texas Bureau of Economic Geology

Note: Publication codes are hyperlinked to their online listing in [The Bureau Store](http://begstore.beg.utexas.edu/store/) (<http://begstore.beg.utexas.edu/store/>).

Cretaceous-Wilcox-Frio Symposia, D. B. Clutterbuck, Editor, 41 p., 1962.
[CCGS 002S](#) \$15.00

Type Logs of South Texas Fields, Vol. I, Frio Trend. Compiled by Don Kling. Includes 134 fields. 158 p., 1972. Ring binder.
[CCGS 015TL](#) \$25.00

Type Logs of South Texas Fields, Vol. II, Wilcox (Eocene) Trend. Compiled by M. A. Wolbrink. 98 p., 1979. Ring binder.
[CCGS 016TL](#) \$25.00

Field Trip Guidebooks

South Texas Uranium. J. L. Cowdrey, Editor. 62 p., 1968.
[CCGS 102G](#) \$12.00

Hidalgo Canyon and La Popa Valley, Nuevo Leon, Mexico. CCGS 1970 Spring Field Conference. 78 p., 1970.
[CCGS 103G](#) \$8.00

Padre Island National Seashore Field Guide. R. N. Tench and W. D. Hodgson, Editors. 61 p., 1972.
[CCGS 104G](#) \$5.00

Triple Energy Field Trip, Uranium, Coal, Gas—Duval, Webb & Zapata Counties, Texas. George Faga, Editor. 24 p., 1975.
[CCGS 105G](#) \$10.00

Minas de Golondrinas and Minas Rancherías, Mexico. Robert Manson and Barbara Beynon, Editors. 48 p. plus illus., 1978.
[CCGS 106G](#) \$15.00

Portrero Garcia and Huasteca Canyon, Northeastern Mexico. Barbara Beynon and J. L. Russell, Editors. 46 p., 1979.
[CCGS 107G](#) \$15.00

Modern Depositional Environments of Sands in South Texas. C. E. Stelling and J. L. Russell, Editors. 64 p., 1981.
[CCGS 108G](#) \$15.00

Geology of Peregrina & Novillo Canyons, Ciudad Victoria, Mexico, J. L. Russell, Ed., 23 p. plus geologic map and cross section, 1981.
[CCGS 109G](#) \$10.00

Geology of the Llano Uplift, Central Texas, and Geological Features in the Uvalde Area. Corpus Christi Geological Society Annual Spring Field Conference, May 7-9, 1982. Various paginated. 115 p., 53 p.
[CCGS 110G](#) \$15.00

Structure and Mesozoic Stratigraphy of Northeast Mexico, prepared by numerous authors, variously paginated. 76 p., 38 p., 1984.
[CCGS 111G](#) \$15.00

Geology of the Big Bend National Park, Texas, by C. A. Berkebille. 26 p., 1984.
[CCGS 112G](#) \$12.00

GEO LINK POST

<http://www.lib.utexas.edu/books/landsapes/index.php> Free service. Rare, fragile, hard-to-find, public domain documents covering various topics about the landscape of Texas. Includes the Texas Geological Survey from 1887 until 1894.

USGS TAPESTRY OF TIME AND TERRAIN <http://tapestry.usgs.gov> The CCGS is donating to all of the 5th and 6th grade schools in the Coastal Bend. Check it out--it is a spectacular map. You might want to frame one for your own office. The one in my office has glass and a metal frame, and It cost \$400 and it does not look as good as the ones we are giving to the schools.

FREE TEXAS TOPOS'S <http://www.tnris.state.tx.us/digital.htm> these are TIFF files from your state government that can be downloaded and printed. You can ad them to SMT by converting them first in Globalmapper. Other digital data as well.

FREE NATIONAL TOPO'S [http://store.usgs.gov/b2c_usgs/b2c/start/\(xcm=r3standardpitrex_prd\)/.do](http://store.usgs.gov/b2c_usgs/b2c/start/(xcm=r3standardpitrex_prd)/.do) go to this webpage and look on the extreme right side to the box titled TOPO MAPS DOWNLOAD TOPO MAPS FREE.

<http://www.geographynetwork.com/> Go here and try their top 5 map services. My favorite is 'USGS Elevation Date.' Zoom in on your favorite places and see great shaded relief images. One of my favorites is the Great Sand Dunes National Park in south central Colorado. Nice Dunes.

<http://antwrp.gsfc.nasa.gov/apod/asropix.html> Astronomy picture of the day--awesome. I click this page everyday.

<http://www.spacimaging.com/gallery/ioweek/iow.htm> Amazing satellite images. Check out the gallery.

<http://www.ngdc.noaa.gov/seg/topo/globegal.shtml> More great maps to share with kids and students.

www.ccgeo.org Don't forget we have our own we page.

<http://terra.nasa.gov/gallery/> Great satellite images of Earth.

www.ermaper.com They have a great free downloadable viewer for TIFF and other graphic files called ER Viewer.

<http://terrasrver.com> Go here to download free aerial photo images that can be plotted under your digital land and well data. Images down to 1 meter resolution, searchable by Lat Long coordinate. Useful for resolving well location questions.

TYPE LOGS OF SOUTH TEXAS FIELDS by Corpus Christi Geological Society

NEW (2009-2010)TYPE LOGS IN RED; ***2011;**

lost now found

ARANSAS COUNTY

Aransas Pass/McCampbell Deep
Bartell Pass
Blackjack
Burgentine Lake
Copano Bay, South
Estes Cove
Fulton Beach
Goose Island
Half Moon Reef
Nine Mile Point
Rockport, West
St. Charles
Tally Island
Tract 831-G.O.M. (offshore)
Virginia

BEE COUNTY

Caesar
Mosca
Nomanna
Orangedale(2)
Ray-Wilcox
San Domingo

Tulsita Wilcox

Strauch_Wilcox

BROOKS COUNTY

Ann Mag
Boedecker
Cage Ranch
Encintas
ERF
Gyp Hill

Gyp Hill West

Loma Blanca
Mariposa
Mills Bennett
Pita
Tio Ayola
Tres Encinos

CALHOUN COUNTY

Appling
Coloma Creek, North
Heyser
Lavaca Bay
Long Mott
Magnolia Beach
Mosquito Point
Olivia
Panther Reef
Powderhorn
Seadrift, N.W.
Steamboat Pass
Webb Point
S.E. Zoller

CAMERON COUNTY

Holly Beach
Luttes
San Martin (2)
Three Islands, East

Vista Del Mar

COLORADO COUNTY

E. Ramsey
Graceland N. Fault Bik
Graceland S. Fault Bik

DEWITT COUNTY

Anna Barre
Cook
*******Nordheim**
Smith Creek
Warmley

Yorktown, South

DUVAL COUNTY

DCR-49
Four Seasons
Good Friday
Hagist Ranch
Herbst
Loma Novia
Petrox
Seven Sisters
Seventy Six, South
Starr Bright, West

GOLIAD COUNTY

Berclair
North Blanca
Bombs
Boyce
Cabeza Creek, South
Goliad, West
St Armo

HIDALGO COUNTY

Alamo/Donna
Donna
Edinburg, West
Flores-Jeffress
Foy
Hidalgo

LA Blanca

McAllen& Pharr
McAllen Ranch
Mercedes
Monte Christo, North
Penitas
San Fordyce
San Carlos
San Salvador
S. Santallana
Shary
Tabasco
Weslaco, North
Weslaco, South

JACKSON COUNTY

Carancahua Creek
Francitas
Ganado & Ganado Deep
LaWard, North
Little Kentucky

Maurbro

StewartSwan Lake

Swan Lake, East
Texana, North
West Ranch

JIM HOGG COUNTY

Chaparosa
Thompsonville,N.E.

JIM WELLS COUNTY

Freebom
Hoelsher
Palito Blanco

Wade City

KARNES COUNTY

Burnell
Coy City
Person
Runge

KENEDY COUNTY

Candelaria
Julian
Julian, North
Laguna Madre

Rita

Stillman

KLEBERG COUNTY

Alazan
Alazan, North
Big Caesar
Borregos
Chevron (offshore)
Laguna Larga
Seeligson
Sprint (offshore)

LA SALLE COUNTY

*****Pearsall**

LAVACA COUNTY

Hallettsville
Hope
Southwest Speaks
Southwest Speaks Deep
LIVE OAK COUNTY

Atkinson

Braslau
Chapa
Clayton
Dunn

Harris

Houdman
Kittie West-Salt Creek
Lucille

Sierra Vista

Tom Lyne

White Creek

White Creek, East

MATAGORDA COUNTY

Collegeport

MCMULLEN COUNTY

Arnold-Weldon

Brazil
Devil's Waterhole
Hostetter

Hostetter, North

NUECES COUNTY

Agua Dulce (3)
Arnold-David
Arnold-David, North
Baldwin Deep

Calallen

Chapman Ranch

Corpus Christi, N.W.

Corpus Christi West C.C.

Encinal Channel

Flour Bluff/Flour Bluff, East

GOM St 9045(offshore)

Indian Point

Mustang Island

Mustang Island, West

Mustang Island St.

889S(offshore)

Nueces Bay/Nueces Bay

West

Perro Rojo

Pita Island

Ramada

Redfish Bay

Riverside

Riverside, South

Saxet

Shield

Stedman Island

Turkey Creek

REFUGIO COUNTY

Bonnieview/Packery Flats

Greta

La Rosa

Lake Pasture

Refugio, New

Tom O'Connor

SAN PATRICIO COUNTY

Angelita East

Commonwealth

Encino

Enos Cooper

Geronimo

Harvey

Hiberia

Hodges

Mathis, East

McC Campbell Deep/Aransas Pass

Midway

Midway, North

Odem

Plymouth

Portilla (2)

Taft

Taft, East

White Point, East

STARR COUNTY

El Tanque

Garcia

Hinde

La Reforma, S.W.

Lyda

Ricaby

Rincon

Rincon, North

Ross

San Roman

Sun

Yturria

VICTORIA COUNTY

Helen Gohike, S.W.

Keeran, North

Marcado Creek

McFaddin

Meyersville

Placedo

WEBB COUNTY

Aquilares/Glen Martin

Big Cowboy

Bruni, S.E.

Cabezon

Carr Lobo

Davis

Hirsch

Juanita

Las Tiendas

Nicholson

O'Hem

Olmitos

Tom Walsh

WHARTON COUNTY

Black Owl

WILLACY COUNTY

Chile Vieja

La Sal Vieja

Paso Real

Tenerias

Willamar

ZAPATA COUNTY

Benavides

Davis, South

Jennings/Jennings, West

Lopeno

M&F

Pok-A-Dot

ZAVALA COUNTY

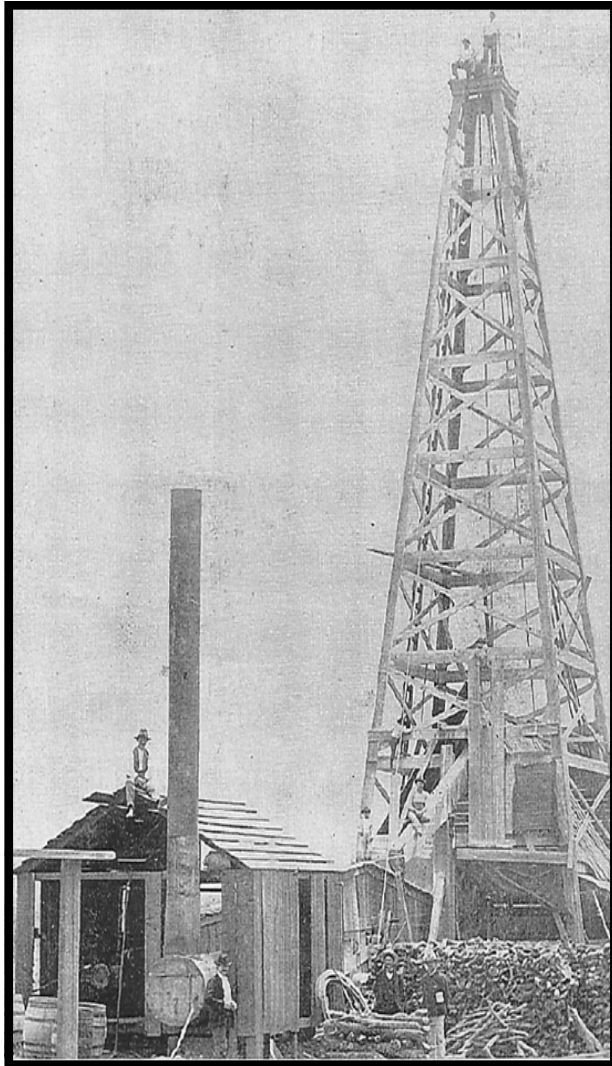
El Bano

Call Coastal Bend Geological Library, Maxine: 361-883-2736
1 log -- \$10 each, 5-10 logs \$9 each and 10 + logs \$8.00 each – plus postage. & paper

OIL MEN
TALES FROM THE SOUTH TEXAS OIL PATCH
DVD
MEMBER PRICE \$25
NON-MEMBER \$30



To Order DVD
Sebastian Wiedmann
swiedmann.geo@gmail.com
If mailed add \$5.00



Corpus Christi Geological Society
C/O Javelina Press
P. O. Box 60181
Corpus Christi, TX 78466

Order Form

Mail order form for Wooden rigs-Iron Men. The price is \$75 per copy, which includes sales tax, handling, and postage

Name _____

Address _____

City, State, Zip _____

No. of books _____ Amount enclosed _____

Send to Corpus Christi Geological Society Book Orders

P. O. Box 60181

Corpus Christi, TX. 78466 Tax exempt# if applicable _____

Wooden Rigs—Iron Men

The Story of Oil & Gas in South
Texas

By Bill & Marjorie K. Walraven

Published by the
Corpus Christi Geological Society

TOG Exploration LLC

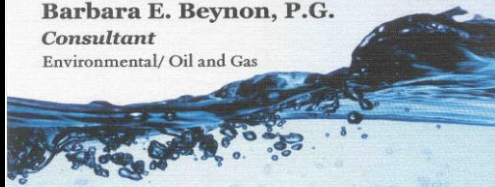
David Becker
Geologist
600 Leopard St. Ste 706
Corpus Christi, TX 78401

dkbecker1137@sbcglobal.net

361-884-3613

Barbara E. Beynon, P.G.

Consultant
Environmental/ Oil and Gas



(361) 774-3369 Bbeynon77@yahoo.com



Dawn S. Bissell
Geoscientist

Advent Geoscience Consulting, LLC
Corpus Christi, TX 78411

Phone: 361-960-2151
Email: bissells@swbell.net

MUD LOGGING SERVICE



Since 1961

MIKE BULLARD

(361) 221-9717 Office (361) 211-9715 Fax
(361)522-1245 Cell P.O. Box 1011
E-Mail md_bullard@sbcglobal.net Kingsville, Tx 78363



flamingo
SEISMIC SOLUTIONS

Elizabeth Chapman
Business development/marketing

11777 Katy Freeway, Ste 570 Houston, TX 77079
office: 281.977.7432 ext 109 | fax: 281.829.1788
cell: 713.817.4232 email: elizabeth@flamingoseismic.com

www.flamingoseismic.com

James L. Claughton
CONSULTING GEOLOGIST

Office | 361-887-2991
Fax | 361-883-4790
Cell | 361-960-2014
clausoie@sbcglobal.net

615 North Upper Broadway
Suite 1935
Corpus Christi, Texas
78401-0779

Jim Collins
Geoscientist



361.537.4034
jim@gulfcoastgas.com

Imagine Resources, LLC

Frank G Cornish
President/Consulting Geologist

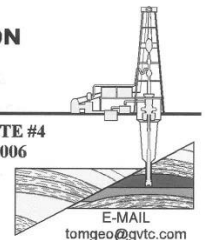
5103 Turnabout Lane
Austin, Tx 78731

361-563-9184
frank.cornish@gmail.com

TOM DAVIDSON
GEOLOGIST

28550 IH-10 WEST SUITE #4
BOERNE, TEXAS 78006

BUS: (210) 844-8963
RES: (830) 981-5883
FAX: (830) 981-5567
CEL: (210) 844-8963



E-MAIL
tomgeo@gvfc.com

SEIMAX
TECHNOLOGIES

Sara Davis
Director of Marketing & Business Development

4805 Westway Park Blvd., Houston, TX 77041
p: 832.554.4301 d: 832.554.4314 c: 713.256.8737
sdavis@seimaxtech.com

Geotech
Logging Services, LLC

Brian Desaulnier
Owner / President
512.923.2059
brian@gtls.us

P.O. Box 305 Office: 512.308.8200
Red Rock, TX 78662 Fax: 830.839.4832
www.geotechloggingservices.com

Leighton L. Devine
Exploration Geologist

SUEMAUR

Experience. Expertise. Exploration.

p. 361-884-8824 x1103
c. 361-510-8872
ldevine@suemaur.com

Suemaur Exploration & Production, LLC
539 North Carancahua, Suite 1100
Corpus Christi, TX 78401

Tommy Dubois
Geologist

2627 CR 312
Yoakum, Texas 77995

361-215-0223 tvdubois@yahoo.com



FRONTERA EXPLORATION CONSULTANTS

Geological and Geophysical Interpretation
SMT Kingdom™ Workstation

THOMAS E. EWING, PH.D.
AAPG CPG #4538; Texas Lic. Geol. #1320

19240 Redland Road, Suite 250, San Antonio, TX 78259
(210) 494-4526; (210) 824-6423 FAX
tewing@fronteraexploration.com

Since 1982

FOX ENVIRONMENTAL SERVICES, LLC

PLANNING | PERMITTING | REAL ESTATE MARKETING MAPS

LAURA M. FOX
LAURA@FOXENVIRONMENTALSERVICES.COM

P.O. Box 745
ROCKPORT, TEXAS 78381

361.319.3119



MATTHEW FRANEY
Consulting Geologist

AAPG Certified Petroleum Geologist #6342
Texas Licensed Professional Geologist #1169

FRANEY OIL OPERATIONS, INC.
600 Leopard Street, Suite 904 361-563-6327
Corpus Christi, TX 78401 mfraney57@att.net

Enrique (Rick) Garza
Operation Supervisor
US Land



Geoscience
Solutions

Rick.Garza@GlobalGeophysical.com
DIRECT +1 713-808-7428
WORK +1 361-701-6480
FAX +1 713-808-7928
13927 South Gessner Road
Missouri City, Texas 77489 USA
www.GlobalGeophysical.com

GISLER BROTHERS LOGGING CO., INC.

P.O. BOX 485
106 E. MAIN

RUNGE, TX 78151



Wes Gisler
Bus. (830) 239-4651
Mobile (361) 676-1369

wes@gislerbrotherslogging.com

YOUR CARD COULD BE HERE!!!

\$30 FOR 10 ISSUES AD. PRICES PRO-RATED. EMAIL ROBBY AT ROBERT.STERETT@GMAIL.COM.



RAY GOVETT, Ph. D.
CONSULTING GEOLOGIST
 361-855-0134

Robert Graham
 President
 grexploration@gmail.com
 Phone 361-882-7681
 Fax 361-882-7685
 Cell 361-774-3635



Exploratory Prospects & Production Development
Mail: P. O. Box 1843
 Corpus Christi, Texas
 78403-1843
Office: 606 N. Carancahua, Ste. 610
 Corpus Christi, Texas
 78401-0634



HART EXPLORATION, LLC.

RICK HART
 Geologist / Owner

P.O. Box 3576
 Bandera, Texas 78003
 Cell: 512-626-3053
 Email: hartexploration@aol.com

RIVIERA EXPLORATION, LLC

H. TONY HAUGLUM
President

600 LEOPARD ST.
 SUITE 1704
 CORPUS CHRISTI
 TEXAS 78401
 PHONE 361.884.1811
 FAX 361.884.8071
 E-MAIL THAUGLUM@SWBELL.NET

Chuck Henry
Vice President, Geosciences



T 713.623.7139 M 713.501.9575
 chenhry@frostwoodenergy.com
 frostwoodenergy.com

6522 Katy Freeway, Suite 100
 Houston, TX 77024
Moving offices on Aug 15th

Brent F. Hopkins
President and Chief Executive Officer

SUEMAUR
 Experience. Expertise. Exploration.

p. 361-884-8824 x1101
 c. 361-215-4855
 bhopkins@suemaur.com
 Suemaur Exploration & Production, LLC
 539 North Carancahua, Suite 1100
 Corpus Christi, TX 78401

James R. Jones
 Geologist

7434 Long S Drive
 Corpus Christi, TX 78414
 361-779-0537
 jrjones5426@aol.com



EOG Resources, Inc.
 539 N. Carancahua
 Suite 900
 Corpus Christi, TX 78401-0908
 Direct: (361) 887-2681

Randy Lambert
 Geological Advisor

Fax: (361) 844-1546
 randy_lambert@eogresources.com

CURTIS R. MAYO
 GEOLOGICAL CONSULTANT

Reserve Analysis Prospect Evaluation
 Expert Witness Prospect Generation

Fredericksburg, Texas 78624
 Office: 830.992.2938 Cell: 830.765.0628 E-Mail: cmayo@ccresc.net



PATRICK J. McCULLOUGH [President]
 patrickm@emeraldbayexp.com

311 Saratoga Boulevard Corpus Christi, Texas 78417
 361.852.6195 [o] 361.852.6676 [f] 361.876.7881 [c]



Armando Medina
 Owner / Geologist

8610 N. New Braunfels #703 • San Antonio, TX 78217
 (210) 538-2170 • amedina@valorexploration.com



J. Mark Miller
 President

Phone (361) 883-7700
 Fax (361) 883-7701
 mark@millersmithgas.com
 545 N. Upper Broadway
 Suite 400
 Corpus Christi, Texas 78476

Wellhead Gas Marketing



Mark Mixon
 Account Manager

mmixon@lmkr.com
 P: +1 281 485 8657
 D: +1 281 848 3310
 C: +1 713 418 8918
 F: +1 281 879 0135

LMK Resources Inc.
 6821 North Course Drive, Suite 300,
 Houston, TX 77072, USA

Mailing Address
 615 Leopard, Ste. 640
 Corpus Christi, Texas 78401-0641
 361.882.7888 phone
 361.882.7889 fax
 361.946.2581 mobile

Contact Address
 1701 Southwest Parkway, Ste. 109
 College Station, Texas 77840
 866.946.2581 phone
 866.946.2580 fax

pmueller@muelexp.com
 www.muelexp.com



J. Paul Mueller, Jr.
 President



Daniel J. Neuberger
 Geologist and President

Austin Office:
 712 Windsong Trail
 West Lake Hills, Texas 78746

Office (361) 548-7723
 Home (512) 306-1223
 dan@neuoilandgas.com

Patrick Nye
 President
 patrick@nyexp.us

Office: (361) 452-1455
 Cell: (361) 658-1089
 Res: (361) 238-2146

NYE
 Exploration & Production, LLC

802 N. Carancahua, Suite 1840
 Frost Bank Plaza
 Corpus Christi, TX 78401
 www.nyexp.us



BRIAN E. O'BRIEN

Main: 713-783-4883
 Fax: 713-783-3039
 Res: 713-784-7911
 Cell: 713-899-5164

510 Bering Drive
 Suite 600
 Houston, Texas 77057

E-mail: bobrien@saxetpetroleum.com



Ken Orlaska
 Account Manager

281-497-8440
 Direct: 281-249-5051
 Fax: 281-558-8096
 Cell: 832-455-1818
 e-mail: korlaska@geotrace.com
 12141 Wickchester Lane, Suite 200
 Houston, Texas 77079
 www.geotrace.com

YOUR CARD COULD BE HERE!!!

\$30 FOR 10 ISSUES AD. PRICES PRO-RATED. EMAIL ROBBY AT ROBERT.STERETT@GMAIL.COM.



Herradura Petroleum, Inc.

JEFF OSBORN
Geologist

711 N. Carancahua, Ste. 1750
Corpus Christi, Texas 78475
e-mail: jeff@herradurapetroleum.com

Office: 361-884-6886
Fax: 361-884-9102
Cell: 361-537-2349



RICHARD E. PAIGE
CHIEF PROJECT GEOLOGIST

539 N. CARANCAHUA, SUITE 1100
CORPUS CHRISTI, TEXAS 78401-0999

OFF: (361) 884-8824 (ext. 1121)
CELL: (361) 563-1517
HOME: (361) 887-1912
rpaige@suemaur.com

Richard M. Parker Consulting Geologist

Adjunct Professor – Geosciences
Texas A&M University - Kingsville
Registered State of Texas Board of Professional Geoscientists
License # 6056

12802 Max Rd.
Brookside Village, Texas 77581
Email: rparkstar@sbcglobal.net
Email: Richard.Parker@tamuk.edu

713-724-4380 Cell 1
713-206-3158 Cell 2
281-412-0745 Home
361-593-4072 A&M



VirTex Operating Co., Inc.

615 North Upper Broadway
Suite 525, WF168
Corpus Christi, Texas 78401
Bus (361) 882-3046
Fax (361) 882-7427

Mobile: (361)443-5593 • E-mail: bpriday@virtexoperating.com

Beth Priday
Geologist

Minerals Exploration and Mining
Uranium In Situ Leach

Richard M. Rathbun, Jr.
Certified Professional Geologist 9544 / AIPG

921 Barracuda Pl.
Corpus Christi, Texas 78411

(361) 903-8207
rathbunassoc@msn.com



Barry J. Rava
President

Mobile: 281-235-7507
Office: 713-621-7282

P.O. Box 820253
Houston, TX 77282-0253

barry@icarusog.com
www.icarusog.com

Deliveries
1710 S. Dairy Ashford Rd., Ste. 202
Houston, TX 77077

First Rock, Inc.

RGR Production

First Rock I, LLC

Gregg Robertson

600 Leopard St., Suite 1800
Corpus Christi, TX 78401
361-884-0791

Email
firstrockinc@msn.com
Cell
210-260-0300



Weatherford

Wireline Services

Weatherford International Ltd.
401 E. Sonterra Blvd., Suite 1
San Antonio, Texas 78258
USA

Sam Roach
US Guld Coast Wireline Sales

+1.210.930.7588 Direct
+1.210.930.7610 Fax
+1.210.241.2463 Mobile

sam.roach@weatherford.com
www.weatherford.com



ION
GEOVENTURES*

Alvin Rowbatham
Sales, Gulf of Mexico

Main +1 713 789 7250
Direct +1 281 781 1065
Fax +1 713 789 7201
Mobile +1 832 372 2366
alvin.rowbatham@iongeo.com

2105 CityWest Blvd., Suite 900
Houston, TX 77042-2839 USA



Doug Sartoris

Exploration Geologist / Managing Partner

800 North Shoreline Blvd.
Suite 2570 South
Corpus Christi, TX 78401

Office: 361-884-1130
Cell: 361-548-1130
doug@dsxenergy.com

TOM SELMAN
selmanlog.com
tselman@selmanlog.com

Ofc. (432) 563-0084
(800) 578-1006
Cell (432) 288-2259



GEOLOGICAL CONSULTING / SURFACE LOGGING SERVICES

P.O. Box 61150
Midland, TX 79711

4833 Saratoga #624
Corpus Christi, TX 78413

P.O. Box 2993
Rock Springs, WY 82902



Petrophysics, Inc.

Velocity Surveys - Synthetics - Sonic Log Data

P.O. Box 863323
Plano, Texas 75086

713.560.9733
jsmith@petrophysics.com
www.petrophysics.com

Joe H. Smith
President

Crossroads Exploration

Gloria D. Sprague
Geologist

189 North First Street, Suite 111
Timpson, Texas 75975

Office: 936-254-3600
Mobile: 936-488-9428

gsprague4532@att.net

DAHCO EXPLORATION, LLC

ROBBY STERETT
GEOLOGIST

P.O. Box 907
CORPUS CHRISTI, TEXAS 78403

OFFICE (361) 887-2981
CELL (361) 739-5618
EMAIL RSTERETT@DAHCO.US

Charles A. Sternbach, Ph.D
President

Star Creek Energy Company

Oil and Gas Exploration

800 Wilcrest Drive, Suite 230
Houston, Texas 77042
office: 281.679.7333
cell: 832.567.7333
carbodude@gmail.com



www.starcreekenergy.com

THOMAS W. SWINBANK
CERTIFIED PETROLEUM GEOLOGIST
PRESIDENT

STRIKE OIL & MINERALS CORP.
P.O. BOX 1339
GEORGETOWN, TEXAS 78627

PHONE/FAX 512-863-7519
HOME 512-863-7903
CELL 512-876-9585

Dennis A. Taylor
President and Chief Geologist
dennis@amshore.com

Off: (361) 888-4496
Fax: (361) 888-4588
Direct Line: (361) 844-6728
Cell: (972) 672-9916



AMSHORE US WIND, LLC

AMSHORE US WIND, LLC

802 N. Carancahua Street, Suite 1250
Corpus Christi, Texas 78401-0019

www.amshore.com

Environmental

Exploration & Production

JEANIE TIMMERMANN

GEOSCIENTIST

TX LICENSE #2289

7214 Everhart #9
Corpus Christi, TX 78413

(361) 991-7451

jtimmermann74@msn.com

YOUR CARD COULD BE HERE!!!

\$30 FOR 10 ISSUES AD. PRICES PRO-RATED. EMAIL ROBBY AT ROBERT.STERETT@GMAIL.COM.



**Davis
Petroleum
Corp.**

www.davispetroleumcorp.com

Jim Travillo
Senior Geoscientist

1330 Post Oak Boulevard
Suite 600
Houston, Texas 77056

Direct: 713.439.6773
Main: 713.626.7766
Fax: 713.626.7775
Cell: 713.823.9332

jtrevillo@davcos.com



WILLIAM A. WALKER, JR.
Certified Petroleum Geologist
bwalker@stalkerenergy.com

1717 WEST 6th STREET, STE. 230 • AUSTIN, TX 78703
2001 KIRBY DR., STE. 950 • HOUSTON, TX 77019

AUSTIN

512.457.8711
cell: 512.217.5192
fax: 512.457.8717

HOUSTON

713.522.2733
cell: 512.217.5192
fax: 713.522.2879

SEBASTIAN P. WIEDMANN
GEOSCIENTIST

4425 DRIFTWOOD PLACE
CORPUS CHRISTI, TEXAS 78411

MOBILE (361) 946-4430
swiedmann.geo@gmail.com



Dave Willis
Onshore Sales

Main +1 713 789 7250
Direct +1 281 781 1035
Mobile +1 281 543 6189
Fax +1 713 789 7201
dave.willis@iongeo.com

2105 CityWest Blvd. | Suite 900
Houston, TX 77042-2839 USA

ROLF WOODS
Exploration Geologist



500 N. Water St., Ste. 1100S — CORPUS CHRISTI, TX 78401-0236
Work: (361) 883-7464 • Fax: (361) 883-3244 • Cell: (361) 947-9200
e-mail: wrwoods@gmail.com