If you have any announcements that require a quick response from your clubs or regions, please forward it to me at htrujillo@rlbayless.com and we will let the Association of Desk and Derrick Clubs know. We will complete the ADDC Insight by the 5th of each month. (or at least try!)

We encourage every member, every club and every region to contribute. All suggestions are welcome.

Thank you to all that have contributed articles, items and ideas for the ADDC Insight.

~Helen Trujillo

Desk and Derrick Club of Farmington, NM
May, 2015

They say that April showers bring May flowers, I can attest that our flowers are in full bloom with the amount of rain we have been experiencing here in South Louisiana. I hope your May flowers are in bloom and that your memberships are blooming and prospering as well.

Five of the seven Region Meetings are over with two more remaining this month. I was fortunate to attend three of the five Region Meetings where I was able to reconnect with old friends and make new life-long friends as well. Each Region Meeting is unique in their own way, all with the common goal of Energy Education and Networking. I was fortunate enough to witness “pigg ing a line” at Region III, tour Schlumberger and learn about how cementing jobs are performed at Region IV and tour an actual working drilling rig amidst the dusty winds of New Mexico at Region V. I can’t wait to experience more educational opportunities at Region I and Region VII Meetings. All Host Clubs should be commended for all of their hard work and dedication into putting together such educational Meetings.

I was delighted to share with the members the progress the Board has made with the Strategic Planning and Marketing Ideas and look forward to sharing the final products very soon.

Open Form at each Region Meeting was very engaging with the membership offering up their opinions for and against the Proposed Amendments. All of your thoughts and ideas were heard and I ask that you discuss the Proposed Amendments in depth at your monthly meetings in order that your Delegate and Alternate come to Convention educated.

I would like to personally congratulate the newly elected Region Directors for 2016:

- Kathy Bickel – Bay Area Club – Region II
- Theresa Adams – Westbank Club – Region III
- Mary T. Vaughan – Dallas Club – Region IV
- Monica Sanchez – Bakersfield Club – Region V
- Tammy Watkins – Enid Club – Region VI

Please help me in extending well wishes to each of them and please offer up your support and volunteer.
ADDC President’s Letter (cont.)

This is a reminder that your taxes need to be submitted to the US Tax Exempt Committee Chair Keith Atkins. Maintaining our tax exempt status depends on each club doing their part.

If you have not already signed up to be an ADDC Regional Representative, positions are still available in most of your Regions. Please visit with your Region Director to find out where you can assist. Step up and volunteer – the reward is amazing!

I had the opportunity to visit Lubbock, TX with Rena Shaffer and Diana Walker prior to attending Region V Meeting. The Overton Hotel is absolutely stunning and I know that you will have a wonderful time in Lubbock, TX with so many educational opportunities being offered. Please remember to send in your Registrations quickly in order that you may attend your preferred functions!

Lori Landry

Upcoming Events:

Region I Meeting, Wheeling, WV
Region VII Meeting, Regina, Saskatchewan
2015 ADDC Convention and Educational Conference, Lubbock, TX

May 14 – 17
May 20 – 24
September 16-20

TAXES ARE DUE

Your Club’s Tax Filings with the IRS (990, 990N, or 990EZ) are due before

May 15, 2015

Over half of the US Clubs have not sent in their paperwork yet!

Get that sent in to Keith Atkins at Keith.Atkins@murphyusa.com
May 2015

Members of Region I,

Our Region Meeting is just days away! I hope that you are all ready for a very educational and fun weekend.

I just love the Oglebay Resort and Conference Center. Just recently, I visited and the beautiful daffodils and tulips were in bloom and were such a spectacular site. When reviewing the weekend schedule we were sure to leave you a few hours to enjoy what Wheeling and Oglebay has to offer.

Kathy Tawney and the GAC have made the planning for the Region I Meeting a breeze. The experience they bring to the table is beyond compare. Sometimes I think Kathy has a direct link to my thoughts.

With the downturn of the industry I am ecstatic at how many members have registered for the Region Meeting. Our members hunger for more education and I salute our member companies for their continued support!

Although I have not yet visited any clubs this year, I have many plans to do so over the summer months when travel is much easier. We all know the winters in Region I can be brutal for the roadway traveler. I am looking forward to visiting as many clubs as possible. If you have a special event that you would like me to attend please let me know and I will make every effort to do so.

I want to take a moment to thank all of Region I. I am pleased with the level of open communication and the comfort that they have all made me feel. Region I is comprised of really great members and I am feeling the passion from everyone. It is an honor to serve you!

See you at the Region I Meeting!

Keep Calm and Educate On!

Penny J. Jacobs
May 2015

Dear Region II Members:

We just finished with the Region II Meeting in Lexington, Kentucky, April 23-24, 2015. Lexington is a beautiful and fun city and I hope everyone had a great and educational experience. I would like to take this opportunity to thank the Heartland Desk and Derrick Club of Southern Illinois, with special thanks to General Arrangements Chairman Kim Oelze, for hosting a very educational and fun-filled Region II Meeting.

The meeting began with 8 people completing their Land and Leasing Certification. Later that afternoon we began our Ambassador Training. I say began because that training is a continuous project. Mr. Seth Whitehead with Energy In Depth lead this session of our Ambassador Training. Accurate information is our best weapon against the opponents of the oil and gas energy and the media who help spread their propaganda. GREATER KNOWLEDGE is the first half of our motto. GREATER KNOWLEDGE does truly lead to GREATER SERVICE. I believe educating the public should be one of our top priorities right now - as individuals, as clubs, and as an association. Seth left us with the Energy In Depth Website, which is www.energyindepth.org. This website contains a great deal of information and is a valuable tool for educating ourselves.

After our Ambassador Training we went to the Buffalo Trace Distillery for our Awards Dinner. The tour of the distillery was very interesting and the tasting was “eye opening” as well. Congratulations to Beth Eizkorn, Tri-State Desk and Derrick Club for her first place President’s Letter, and to Alesia Adams, Tri-State Desk and Derrick Club for her first place for Best Industry Field Trip.

We had our Open Forum and Region II Meeting Business Session on Friday morning and ended a great meeting with our Industry Luncheon at noon. Seth Whitehead was our speaker and he shared some of the Current Oil and Gas Industry National Issues.

I hope everyone who attended the Region II Meeting left with Greater Knowledge, which they will use for Greater Service. Please remember that We are All Ambassadors of Oil and Gas Education.

We would like to extend our condolences to Mary Jo Hollensbe, President of the Heartland Desk and Derrick Club of Southern Illinois, and Chelsea Hollensbe on the loss of their husband and father, Dean Hollensbe. His company, GeoSearch, has long been a supporter of Desk and Derrick. Dean Hollensbe served on the Illinois Oil and Gas Association Executive Board, currently as the First Vice-President, and he was a founding member of the Illinois Petroleum Resources Board and continued to serve on their Board of Directors since its inception in 1999.

If you haven’t done so already, please take a minute to look at the 2015 Convention information available on the ADDC Website. I look forward to seeing everyone in Lubbock.

Deb Perjak
2015 Region II Director
Valina Blanchard  
Region III Director  
Perry Flying Center, Inc.  
PO Box 85  
Petterson, LA 70392-0085  
(985) 395-4501 O  
(985) 397-0988 C  
v.mullen.plc@glacoaxmail.com (O)

MAY 2015

CONGRATULATIONS to our newly elected Theresa Adams, 2016 Region III Director  
Elect! Theresa is more than qualified to serve in this capacity since she has served before in 1996 and continued to serve all the way to becoming the ADDC President in 2000. We are especially fortunate to take on this role on again. We thank you, Theresa!

I also want to offer my warmest gratitude to General Arrangement Chairman Sheryl Cole and Phyllis Powell and all the rest of the members of the Red River Club for making this region meeting such a huge success. I can't begin to thank Bonnie Fish and Margie Steed enough for preparing and setting things up for the reception on Wednesday. How nice to receive a beautiful bouquet of flowers when I arrived from Dorothy Semons.

I don't know what I would have done without my Assistant Susan Ashton and Charlotte Ratcliff who acted on Margaret's behalf. They were my lifeline!

The Region III Fund Resolution update was voted on and approved, proposed amendments were discussed, and Region III Presidents' Reports were read. Reports not read at the region meeting are posted on website.

The Nominating Committee is looking for nominees, you check for the deadline on website. The deadline date for the Distinguished Service Award (DSA) and Special Achievement Award (SAA) is July 15, 2015. Please consider nominating someone for these prestigious positions.

Are you all pumped up for convention? I certainly am. So many interesting sites to visit!

Convention in Lubbock, TX Sept. 16 – 20, 2015 has so much to offer, full day field trips to Pal Duro Canyon and the Panhandle Plains Historical Museum, Oxy CO2 Recover Plant and Llano Estacado Winery, Sweetwater, BNSF Energy Rail Park and WASO WWII Museum and the Terry Fuller Petroleum Engineering Research Building, the Silent Wings Museum and Berg Studios. Half Day Field Trips like Geosciences Department on the Texas Tech Campus and the National Ranching Heritage Center, along with Museum of Texas Tech University and the National Wind Institute.

Many seminars to choose from and the Certification course offered is on Geology. These are just some of the events to be taken advantage of for the $200.00 registration fee. Rooms available at the Overton Hotel for rooms call (806)776-7000. Visit the ADDC website www.addc.org for updates and information on the sights, activities and please register now.

Val
My theme this year is “Pay it Forward thru Service and Education”. I encourage everyone to remember to pay it forward.

I can’t believe that the Region IV meeting has come and gone. The San Antonio Club did such an awesome job. As with any other meeting there were ups and downs but as Kathy would keep saying we are making lemonade. She was such a great GAC while keeping things going. The speakers were very informative and the field trip was fun even thou the girls got rained on. I can’t tell all of you from Region IV how your support and friendship means to me, no matter what I asked you stepped up to help. Congrats to Mary T. Vaughan from the Dallas Club on being elected as the 2016 Region IV Director.

At the business meeting I chose Michaela Greer to receive a Pay it Forward envelope. With the money received she started a donation fund for Terry Ligon who lost her home in a fire. The members of Region IV pulled together and with the money raised, Michaela purchased VISA gift cards to be presented to her. It shows that Desk and Derrick members are our extended family. Now that’s paying it forward!

Nominations for the Distinguished Service Award and for Special Achievement Awards must be received by the Public Relations Chairperson no later than July 15th, 2015. All entries must be submitted either via e-mail/electronic file or postmarked via USPS by 5:00 pm CST. ADDC members and non-members will be eligible for nomination for the Distinguished Service Award and only ADDC members, clubs and/or committees are eligible for nominations for the Special Achievement Award. The nomination forms and guidelines are on the ADDC website.

The registration packet for the 2015 ADDC Convention in Lubbock have been emailed and is on the website. It’s hard to decide what fieldtrips and seminars to go to. The convention is Sept. 16 – 20 2015. Audra Horton, 2015 Co-GAC and team have done a wonderful job and I can’t wait to go to Lubbock.

Cindy
May 2015

Region V Members,

I have just returned from our very successful Region V Meeting in Artesia New Mexico! We had 94 members attend. Thank you all for the great turnout! I want to thank the Artesia Club for their hard work and dedication. It was a blessing to work with such dedicated members!

Our very first Certification class was a tremendous success! The attendees were then able to see everything we learned about drilling the next day as we toured an active rig! We toured the first fully automated cement plant in the country. We also learned about how a well is plugged for abandonment. Some members attended a leadership seminar and learned how to expand their role as a leader. We finished off the weekend learning about Global Energy Demands. Within and between those opportunities we were able to enjoy the fellowship of our fellow members!

Congratulations go out to Monica Sanchez, Bakersfield Club, our 2016 Region V Director Elect. Monica is full of energy, life, a love of Desk and Derrick and great ideas for moving us forward. 2016 is going to be a great year!

Here is a quick recap of open forum:

- Discussed possible changes to moving or combining Regional Meetings with Convention. The majority were not in favor of making any changes at this time.
- Formed a committee to explore having a separate Regional Treasurer.
- The members were not in favor of Proposed Bylaw Amendments #1, 3, and 8.
- The members were in favor of Proposed Bylaw Amendments #2, 4, and 6.
- The members were on the fence on Proposed Bylaw Amendments # 5 and 7.

Registration packets for the 64th Annual Convention and Educational Conference to be held 9/16-19 in Lubbock TX have been sent out. Please register early to secure your spots on the field trips. It is going to be a great Convention put on by all the members of Region V!

Reminder: TAXE1 is due 5/15.

If you have any ideas, questions, or anything to discuss you can reach me at my office, cell (call or text) or email. Please feel free to contact me anytime!

“Secret to getting ahead is getting started.” – Mark Twain
Region VI Members,

Well we did it! The 2015 Region VI Meeting was a success. We changed things up just a bit. I hope that you all enjoyed the changes I made to our meeting. I want to once again thank the Red Earth club for doing such a wonderful job.

Now that our Region Meeting is over, it is time to start thinking about the future events in the Association coming up. I hope that a past Region Director will consider running for an office on the executive board. If you are interested please contact Becky Thetford. Your delegates were given the registration packet for Convention. Make you hotel arrangements early and get those registration packets turned in.

The conference call for April had to be cancelled. I hope that we have full attendance on the conference call this month. Valuable information is shared by those that participate. If there are members that are considering running for a position on your local board or higher they are invited to attend this call as well.

The new Committee Chair and Region Rep form is available on the ADDC web page. If you have trouble logging in or are unable to find it, please notify me and I will make sure you get a copy. Let’s assist our 2016 Region Director Elect, Tammy Watkins and 2016 President Elect in getting all positions for Region VI completed by Convention.

I would like to once again Congratulate Tammy Watkins on being elected for 2016 Region Director Elect. She will do a fantastic job in leading us in 2016. I hope that after her term as Region Director she considers moving up the chain. Tammy is a strong willed, confident person. She will represent Region VI very well.

Let’s keep striving to increase membership and retain our current members. ADDC is not about who supports you but the commitment to learning and becoming a stronger employee.

Convention dates are September 16-20, 2015. I am looking forward to seeing a large turnout of members from Region VI.

Until Next Time,

Anna Lewis-McBeth
May 2015

Dear Region VII Members:

Well, this is the month for our Region VII Meeting which is being held in Regina [dates below]. I hope you all have your registrations in and are getting excited to take part in the field trip and seminars that the GAC has arranged. It will be lots of fun as well as educational. Some of us will even be Rider Fans.

The SE Saskatchewan is hosting a wonderful “Last Hurrah” and though bitter sweet, they have put a lot of time and effort into its planning. Please try to attend.

We will not be reading all of the committee reports at the regional meeting but these reports can be read on the ADDC website, in the Members Only section. Please go there to read what each committee is doing this year and what they are hoping to accomplish on your behalf in 2015.

The GAC for the Education Conference in Lubbock TX is also working very hard to make this year’s annual event very educational. The registration package is also on the ADDC website where you can download it.

Speaking of the Education Conference, the Distinguished Service Award (DSA) and the Special Achievement Award (SSA) deadlines are July 15, 2015. The nominating forms can be found on the website (or through me). This is an excellent opportunity to showcase and recognize service that goes over and above.

Both the region meeting and education conference are great learning opportunities, and a time to renew friendships and really get into the meat and potatoes of ADDC business. I enjoy both of these for what I can get out of them, to my benefit. I really do hope you find the same experience.

Spring is renewal; it is a time when we see nature go from “ordinary to extraordinary”. As I sit here writing this letter, we have workers putting in some patio paving stones which is helping to make our yard go from “ordinary to extraordinary”! I can hardly wait for the all the blossoms and the nice green grass which I will enjoy from my new patio! Possibly sipping a margarita with friends and family? Who knows!

This yearly renewal of seasons is my favorite.

As I sign off for another month, I want to remind everyone that together, we can ensure that ADDC stays current and go from Ordinary to Extraordinary!

Upcoming events:

Region VII Meeting
2015 ADDC Convention
Regina SK
Lubbock TX
May 20 – 24, 2015
September 16 – 19, 2015
May 2015

ADO Goes to Region IV Meeting or (a.k.a – The Clampett’s Go to Maui!)

All I can say is, WOW!!! This was one of the most dynamic and educational trips that I have had the chance to be a part of. Many thanks to the Region IV Clubs and the Board for affording me this wonderful opportunity.

Where do I begin??? I guess I should start by saying, the longer I was in San Antonio, the less I realized that I knew about not only that part of the state, but the oil and gas industry itself. My trip started with an 8.5 hour drive from Tulsa and terminated in one of the most beautiful hotels I had ever stayed in, The Sheraton Gunter Hotel, San Antonio. Located in the heart of downtown, this hotel was FABULOUS and swank!!! Also, it was connected to the River Walk, which is in of itself an amazing destination.

After a good night’s rest, our first workshop was with Maggi Franks (ADDC VP), breaking down the good, bad and ugly about the ADDC website. It was very informative. However, since I’m one of the “techno Geeks” not much of the information came as a huge surprise. Thanks Maggi for your help and information.

Next we were “entertained” by David Decaurex of Haliburton. Through humor and in depth information given visually as well as via speech, we were able to learn more about the workings of Haliburton as well as the products and services that they offer. He explained the process of cementing the well site hole as well as what needs to happen to make sure there is no failure, especially downhole. He touched on fracking and horizontal drilling. Also, mentioned the security measures that are in place to make sure groundwater is not contaminated. It was an amazing presentation.

The next seminar that morning was led by John Long, and Independent Geologist. Not to mix metaphors here, but I’ve never felt so much like Gilligan listening to the Professor in my life. The wealth of knowledge that John imparted in such a small amount of time was really enough to write several books. Through the use of slides, samples, Q&A we were able to learn about rock formations, where companies are able to find oil and water; fossils, etc. It was like someone listening to an interactive Encyclopedia Britannica! AND, at the same time, he made it very practical. I’m sure I’ll be processing this presentation for weeks to come.

That evening we, “loaded up the bus and moved to Bever –lee”, wait! We did load up the bus, but we went to the Singing Waters Wine Vineyard ... outside of a town
appropriately named, Comfort, TX. Because I am a wine lover, this was a real treat to be able to visit an active vineyard and processing area. Because of the terrain of the country, there was a little doubt that our tour bus was going to be able to navigate the hills and hairpin corners. However, with much success (and prayers!!) we arrived. (SIDEBAR: I had the wonderful pleasure of sitting next to President Lori Landry on the bus ride. There, Lori pulled out a piece of paper and walked me through the process of cementing a hole. The Seminar speaker from Halliburton caused more questions than answers, for me, so I needed a little bit of tutoring. Lori patiently and thoroughly diagramed the process. Thank you Lori, that was very generous for you to do. Once again proving that this organization is about Education . . . however it may present itself) The wine, the food, the music along with some amazing weather was truly magical! It was wonderful sampling side by side the many varieties of wine this company had to offer. The owner (whose name escapes me right now) was a very delightful man and made himself available to all of us . . . engaging in casual conversation.

On Friday, we loaded up the bus (new bus driver ☹) and headed to the Schlumberger facility. SHUT THE FRONT DOOR!!! This was again, another amazing trip!!! Once again we were able to sit through a presentation on the processes around cementing a well hole, however this afforded us a much deeper, hands on approach, as we were able to not only see the machines and vehicles used in a slide presentation, but also we were able to go out to the yard and physically touch the vehicles. These are amazing feats of ingenuity. While one of the presenters was speaking about the cement process, I looked back at Lori (since she gave me my 101 bus lesson). She was spot on!!!

If you’ve read this far, please indulge me to bring this letter to a close.

The evening activities were delightful and well planned and initiated. However, for me it was fantastic to see the passion and care of the membership during the business sessions. If I walked away with anything it was this: Desk and Derrick matters!!! This organization changes lives. Members are passionate because they each have their own story of how ADDC has impacted their life. If I could offer any suggestion it would be to not use the phrase that has stymied many an organization: We’ve Never Done It That Way Before! If you/we want to reach the next generation, we have to use THEIR filters on how THEY process information. Welcome these new ideas. Test them. If they work, fantastic! If they don’t count it as “research”. After all isn’t that what it truly means to be successfully educated? Collecting the data and finding out what works?

I count it a joy and privilege to be a part of this organization.

With much gratitude,

Andre’
ADO Manager
A Glimpse into the Region Meetings

Region II in Lexington, KY

Toasting Theresa Adams for being 2015 Region III Director Elect (with Bonnie Wall)

Region III in Bossier City, LA
A Glimpse into the Region Meetings (cont.)

Farmington Club at Region V in Artesia, NM Always Professional...

...or NOT

Region VI Business Meeting in Norman, OK

Region VI AIMEE Award Winners for Best D&D Article “Region Recap”
The 64th Annual ADDC Convention and Education Conference proudly offer exciting and educational field trips for the member’s continuing education. Check out these opportunities to not only see a different part of Texas, but see how one club introduces the Bit of Fun Energy Activity book to the schools in their town.

Field Trip #7 Sweetwater–Energy Capital, BNSF Rail Yard, National WASP WW II Museum

You will visit the BNSF Railway Company (BNSF) new BNSF Logistics Center as well as the rail yard in Sweetwater, Texas. The new Logistics Center was designed to meet the growing supply chain needs of a strong energy corridor across Texas for many energy-related commodities in the Permian Basin and Cline Shale. The facility will also support the strength of Texas agriculture. The new facility means that Sweetwater will serve as a transportation hub for the entire region as the new shales of play continue producing new wells with the bright future of an estimated 30 billion barrels of recoverable oil in this part of Texas. BNSF Railway is one of North America’s leading freight transportation companies operating on 32,500 route miles of track in 28 states and two Canadian provinces. BNSF is one of the top transporters of consumer goods, grain and agricultural products, low-sulfur coal and industrial goods such as petroleum, chemicals, housing materials, food and beverages. BNSF’s shipments help feed, clothe, supply and power American homes and businesses every day. BNSF and its employees have developed one of the most technologically advanced and efficient railroads in the industry.

Seminar #15 Bit of Fun EAB Presentation

Desk and Derrick encourages the education of its members and the general public. We are always stating that we need to teach people how important our industry is, but how do we get started?

Geneva Wood, a member of the Wichita Falls Desk and Derrick Club of Region V, will present this seminar based on the Energy Activity Book (EAB). “Bit of Fun” is an activity and coloring book designed to promote education about the oil and gas industry.

Geneva will demonstrate how to incorporate this educational tool to teach the younger (and older) generations how important oil and gas is and how it affects our industry. Geneva will show us how she uses the “Bit of Fun” with 5th grade school children to educate them. After you’ve attended this seminar, you’ll be ready to return home and teach the school children and their parents in your area the importance of our industry!

The dates are September 16-20, 2015. Make your plans now to attend at the great registration price of $200 if postmarked by July 31, 2015. Be sure to make your reservations with the Overton Hotel at 806-776-7000.
Save the Date
May 11 & 12, 2016

Two day conference program presenting current technology plus environmental, safety and regulatory updates

Inside and outside exhibit space on first come basis
APPLICATIONS AVAILABLE August 2015

For more information about the 2016 Four Corners Oil & Gas Conference contact the conference coordinator at 505-787-0322 or the Farmington Chamber of Commerce at 505-325-0279, or email fourcornersoilandgas@hotmail.com or go to www.fourcornersoilandgas.com.

Presented by the Four Corners Chapters of the: American Petroleum Institute
American Society of Safety Engineers
Society of Petroleum Engineers
Sandia Mountain Section of NACE International,
Desk and Derrick Club of Farmington
Farmington Chamber of Commerce.
This puzzle goes all directions and backward. Have fun!
Break Time (Cont.)

DRILLING (Cont.)

ANNULUS  HYDROGENSULFIDE  TOOLPUSHER
AQUIFER  JACKUP  TOTALDEPTH
BACKOFF  JOINT  TURNKEY
BAREFOOT  JUNK  UNDERBALANCE
BLOWOUT  KELLY  UPSET
BOREHOLE  KILL  VEEDOOR
BREAKOUT  LINER  WASHOUT
BRIDGE  LOG  WEEVIL
CASING  LUBRICATOR  WELLBORE
CATHEAD  MAKEUP  WILDCAT
CELLAR  MAST  WORM
CEMENT  MOONPOOL  YIELD
CHRISTMASTREE  NIPPLE  ZIPGROOVE
CIRCULATE  OPERATOR
COMPLETION  PACKER
CUTTINGS  PILL
DOGHOUSE  POOH
DOPE  RATHOLE
DRILLSTRING  RIGDOWN
DUSTER  ROTARYTABLE
ECCENTRIC  ROUSTABOUT
EROSION  SHAKER
ELEVATOR  SHEAVE
FISH  SHOE
FINGERBOARD  SIDETRACK
GAMMARAYLOG  SLIPS
GEOSTEERING  SURVEY
GOOSENECK  SWAB
GUMBO  TEXASDECK
HOPPER  TONGS

Definitions on next page. Solution on page 28.
DEFINITIONS

ANNULUS - The space between two concentric objects, such as between the wellbore and casing or between casing and tubing, where fluid can flow. Pipe may consist of drill collars, drillpipe, casing or tubing.

AQUIFER - A body of rock whose fluid saturation, porosity and permeability permit production of groundwater.

BACKOFF - To unscrew drillstring components downhole. The drillstring, including drillpipe and the bottomhole assembly, are coupled by various threadforms known as connections, or tool joints. Often when a drillstring becomes stuck it is necessary to "back off" the string as deep as possible to recover as much of the string as possible. To facilitate the fishing or recovery operation, the backoff is usually accomplished by applying reverse torque and detonating an explosive charge inside a selected threaded connection. The force of the explosion enlarges the female (outer) thread enough that the threaded connection unscrews instantly. A torqueless backoff may be performed as well. In that case, tension is applied, and the threads slide by each other without turning when the explosive detonates. Backing off can also occur unintentionally. Synonyms: break out

BAREFOOT - Referring to openhole or without casing, as in barefoot completion or barefoot drillstem test.

BLOWOUT - Uncontrolled flow of formation fluids from a well. An uncontrolled flow of formation fluids from the wellbore or into lower pressured subsurface zones (underground blowout). Uncontrolled flows cannot be contained using previously installed barriers and require specialized services intervention.

A blowout may consist of water, oil, gas or a mixture of these. Blowouts may occur during all types of well activities and are not limited to drilling operations. In some circumstances, it is possible that the well will bridge over, or seal itself with rock fragments from collapsing formations downhole.

BOREHOLE - The wellbore itself, including the openhole or uncased portion of the well. Borehole may refer to the inside diameter of the wellbore wall, the rock face that bounds the drilled hole.

BREAKOUT - The process of unscrewing drillstring components, which are coupled by various threadforms known as connections, including tool joints and other threaded connections.

BRIDGE - The gangplank or stairway connecting a jackup rig to a fixed platform.

CASING - Large-diameter pipe lowered into an openhole and cemented in place. The well designer must design casing to withstand a variety of forces, such as collapse, burst, and tensile failure, as well as chemically aggressive brines. Most casing joints are fabricated with male threads on each end, and short-length casing couplings with female threads are used to join the individual joints of casing together, or joints of casing may be fabricated with male threads on one end and female threads on the other. Casing is run to protect fresh water formations, isolate a zone of lost returns or isolate formations with significantly different pressure gradients. The operation during which the casing is put into the wellbore is commonly called "running pipe." Casing is usually manufactured from plain carbon steel that is heat-treated to varying strengths, but may be specially fabricated of stainless steel, aluminum, titanium, fiberglass and other materials.

CATHEAD - A clutched spool connected to the drawworks power system used to tension chains, cables and softline rope.
DEFINITIONS

CELLAR - A dug-out area, possibly lined with wood, cement or very large diameter (6 ft [1.8 m]) thin-wall pipe, located below the rig. The cellar serves as a cavity in which the casing spool and casinghead reside. The depth of the cellar is such that the master valve of the Christmas tree are easy to reach from ground level. On smaller rigs, the cellar also serves as the place where the lower part of the BOP stack resides, which reduces the rig height necessary to clear the BOP stack on the top. Prior to setting surface casing, the cellar also takes mud returns from the well, which are pumped back to the surface mud equipment.

CEMENT - The material used to permanently seal annular spaces between casing and borehole walls. Cement is also used to seal formations to prevent loss of drilling fluid and for operations ranging from setting kick-off plugs to plug and abandonment. The most common type by far is API Oilwell Cement, known informally as Portland cement. Generally speaking, oilfield cement is thinner and exhibits far less strength than cement or concrete used for construction due to the requirement that it be highly pumpable in relatively narrow annulus over long distances. Various additives are used to control density, setting time, strength and flow properties. Additionally, special additives are often used to reduce the occurrence of annular gas flow. The cement slurry, commonly formed by mixing Portland cement, water and assorted dry and liquid additives, is pumped into place and allowed to solidify (typically for 12 to 24 hours) before additional drilling activity can resume. The cement usually must reach a strength of 5000 psi [34,474 KPa] before drilling or perforating. More advanced oilfield cements achieve higher set-cement compressive strengths by blending a variety of particle types and sizes with less water than conventional mixtures of Portland cement, water and chemical additives.

CHRISTMASTREE - The set of valves, spools and fittings connected to the top of a well to direct and control the flow of formation fluids from the well.

CIRCULATE - To pump fluid through the whole active fluid system, including the borehole and all the surface tanks that constitute the primary system.

COMPLETION - The hardware used to optimize the production of hydrocarbons from the well. This may range from nothing but a packer on tubing above an openhole completion ("barefoot" completion), to a system of mechanical filtering elements outside of perforated pipe, to a fully automated measurement and control system that optimizes reservoir economics without human intervention (an "intelligent" completion).

CUTTINGS - Small pieces of rock that break away due to the action of the bit teeth. Cuttings are screened out of the liquid mud system at the shale shakers and are monitored for composition, size, shape, color, texture, hydrocarbon content and other properties by the mud engineer, the mud logger and other on-site personnel. The mud logger usually captures samples of cuttings for subsequent analysis and archiving.

DOGHOUSE - The steel-sided room adjacent to the rig floor, usually having an access door close to the driller’s controls. This general-purpose shelter is a combination tool shed, office, communications center, coffee room, lunchroom and general meeting place for the driller and his crew. It is at the same elevation as the rig floor, usually cantilevered out from the main substructure supporting the rig.

DOPE - Pipe dope, a specially formulated blend of lubricating grease and fine metallic particles that prevents thread galling (a particular form of metal-to-metal damage) and seals the roots or void spaces of threads. The American Petroleum Institute (API) specifies properties of pipe dope, including its coefficient of friction. The rig crew applies copious amounts of pipe dope to the drillpipe tool joints every time a connection is made.

DRILLSTRING - The combination of the drillpipe, the bottomhole assembly and any other tools used to make the drill bit turn at the bottom of the wellbore.

DUSTER - Slang term for dry hole.
**DEFINITIONS**

**ECCENTRIC** - Off-center, as when a pipe is off-center within another pipe or the openhole. Eccentricity is usually expressed as a percentage. A pipe would be considered to be fully (100%) eccentric if it were lying against the inside diameter of the enclosing pipe or hole. A pipe would be said to be concentric (0% eccentric) if it were perfectly centered in the outer pipe or hole. Eccentricity becomes important to the well designer in estimating casing wear, wear and tear on the drillstring, and the removal of cuttings from the low side of an inclined hole. In the latter case, if the drillpipe lies on the low side of the hole (100% eccentric), the eccentricity results in low-velocity fluid flow on the low side. Gravity pulls cuttings to the low side of the hole, building a bed of small rock chips on the low side of the hole known as a cuttings bed. This cuttings bed becomes difficult to clean out of the annulus and can lead to significant problems for the drilling operation if the pipe becomes stuck in the cuttings bed.

**EROSION** - The wearing away of material, usually rock or steel, by the continuous abrasive action of a solids-laden slurry. For erosion to occur usually requires a high fluid velocity, on the order of hundreds of feet per second, and some solids content, especially sand. Erosion may also occur in gas streams, again assuming the presence of sand particles. It is usually difficult to erode the wellbore wall significantly with drilling mud alone due to its relatively low velocity and high viscosity. There is also a dramatic "self-limiting" effect because even slight enlargement of the original gauge wellbore dramatically decreases fluid velocities.

**ELEVATOR** - A hinged mechanism that may be closed around drillpipe or other drillstring components to facilitate lowering them into the wellbore or lifting them out of the wellbore. In the closed position, the elevator arms are latched together to form a load-bearing ring around the component. A shoulder or taper on the component to be lifted is larger in size than the inside diameter of the closed elevator. In the open position, the device splits roughly into two halves and may be swung away from the drillstring component.

**FISH** - Anything left in a wellbore. It does not matter whether the fish consists of junk metal, a hand tool, a length of drillpipe or drill collars, or an expensive MWD and directional drilling package. Once the component is lost, it is properly referred to as simply "the fish." Typically, anything put into the hole is accurately measured and sketched, so that appropriate fishing tools can be selected if the item must be fished out of the hole.

**FINGERBOARD** - The working platform approximately halfway up the derrick or mast in which the derrickman stores drillpipe and drill collars in an orderly fashion during trips out of the hole. The entire platform consists of a small section from which the derrickman works (called the monkeyboard), and several steel fingers with slots between them that keep the tops of the drillpipe in place.

**GAMMARAYLOG** - A common and inexpensive measurement of the natural emission of gamma rays by a formation. Gamma ray logs are particularly helpful because shales and sandstones typically have different gamma ray signatures that can be correlated readily between wells.

**GEOSTEERING** - The intentional directional control of a well based on the results of downhole geological logging measurements rather than three-dimensional targets in space, usually to keep a directional wellbore within a pay zone. In mature areas, geosteering may be used to keep a wellbore in a particular section of a reservoir to minimize gas or water breakthrough and maximize economic production from the well.

**GOOSENECK** - An inverted "U" shaped section of rigid piping normally used as a conduit for high-pressure drilling fluid. In particular, the term is applied to a structure that connects the top of a vertical standpipe running up the side of a derrick or mast to a flexible kelly hose that in turn is connected to another gooseneck between the flexible line and the swivel.

**GUMBO** - A generic term for soft, sticky, swelling clay formations that are frequently encountered in surface holes offshore or in sedimentary basins onshore near seas. This clay fouls drilling tools and plugs piping, both severe problems for drilling crews.

**HOPPER** - In general, a funnel-shaped device used to transfer products. The hopper is often at the bottom of any container for holding or using bulk products, especially drilling fluid additives and cementing material.
DEFINITIONS

HYDROGENSULFIDE - \([H_2S]\) An extraordinarily poisonous gas with a molecular formula of \(H_2S\). At low concentrations, \(H_2S\) has the odor of rotten eggs, but at higher, lethal concentrations, it is odorless. \(H_2S\) is hazardous to workers and a few seconds of exposure at relatively low concentrations can be lethal, but exposure to lower concentrations can also be harmful. The effect of \(H_2S\) depends on duration, frequency and intensity of exposure as well as the susceptibility of the individual. Hydrogen sulfide is a serious and potentially lethal hazard, so awareness, detection and monitoring of \(H_2S\) is essential. Since hydrogen sulfide gas is present in some subsurface formations, drilling and other operational crews must be prepared to use detection equipment, personal protective equipment, proper training and contingency procedures in \(H_2S\)-prone areas. Hydrogen sulfide is produced during the decomposition of organic matter and occurs with hydrocarbons in some areas. It enters drilling mud from subsurface formations and can also be generated by sulfate-reducing bacteria in stored muds. \(H_2S\) can cause sulfide-stress-corrosion cracking of metals. Because it is corrosive, \(H_2S\) production may require costly special production equipment such as stainless steel tubing. Sulfides can be precipitated harmlessly from water muds or oil muds by treatments with the proper sulfide scavenger. \(H_2S\) is a weak acid, donating two hydrogen ions in neutralization reactions, forming \(HS^-\) and \(S^{2-}\) ions. In water or water-base muds, the three sulfide species, \(H_2S\) and \(HS^-\) and \(S^{2-}\) ions, are in dynamic equilibrium with water and \(H^+\) and \(OH^-\) ions. The percent distribution among the three sulfide species depends on pH. \(H_2S\) is dominant at low pH, the \(HS^-\) ion is dominant at mid-range pH and \(S^{2-}\) ions dominate at high pH. In this equilibrium situation, sulfide ions revert to \(H_2S\) if pH falls. Sulfides in water mud and oil mud can be quantitatively measured with the Garrett Gas Train according to procedures set by API.

JACKUP - A self-contained combination drilling rig and floating barge, fitted with long support legs that can be raised or lowered independently of each other. The jackup, as it is known informally, is towed onto location with its legs up and the barge section floating on the water. Upon arrival at the drilling location, the legs are jacked down onto the seafloor, preloaded to securely drive them into the seabottom, and then all three legs are jacked further down. Since the legs have been preloaded and will not penetrate the seafloor further, this jacking down of the legs has the effect of raising the jacking mechanism, which is attached to the barge and drilling package. In this manner, the entire barge and drilling structure are slowly raised above the water to a predetermined height above the water, so that wave, tidal and current loading acts only on the relatively small legs and not the bulky barge and drilling package.

JOINT - A length of pipe, usually referring to drillpipe, casing or tubing. While there are different standard lengths, the most common drillpipe joint length is around 30 ft [9 m]. For casing, the most common length of a joint is 40 ft [12 m].

JUNK - Anything in the wellbore that is not supposed to be there. The term is usually reserved for small pieces of steel such as hand tools, small parts, bit nozzles, pieces of bits or other downhole tools, and remnants of milling operations.

KELLY - A long square or hexagonal steel bar with a hole drilled through the middle for a fluid path. The kelly is used to transmit rotary motion from the rotary table or kelly bushing to the drillstring, while allowing the drillstring to be lowered or raised during rotation. The kelly goes through the kelly bushing, which is driven by the rotary table. The kelly bushing has an inside profile matching the kelly's outside profile (either square or hexagonal), but with slightly larger dimensions so that the kelly can freely move up and down inside.

KILL - To stop a well from flowing or having the ability to flow into the wellbore. Kill procedures typically involve circulating reservoir fluids out of the wellbore or pumping higher density mud into the wellbore, or both. In the case of an induced kick, where the mud density is sufficient to kill the well but the reservoir has flowed as a result of pipe movement, the driller must circulate the influx out of the wellbore. In the case of an underbalanced kick, the driller must circulate the influx out and increase the density of the drilling fluid. In the case of a producing well, a kill fluid with sufficient density to overcome production of formation fluid is pumped into the well to stop the flow of reservoir fluids.
DEFINITIONS

LINER - A casing string that does not extend to the top of the wellbore, but instead is anchored or suspended from inside the bottom of the previous casing string. There is no difference between the casing joints themselves. The advantage to the well designer of a liner is a substantial savings in steel, and therefore capital costs. To save casing, however, additional tools and risk are involved. The well designer must trade off the additional tools, complexities and risks against the potential capital savings when deciding whether to design for a liner or a casing string that goes all the way to the top of the well (a "long string"). The liner can be fitted with special components so that it can be connected to the surface at a later time if need be.

LOG - To continuously measure formation properties with electrically powered instruments to infer properties and make decisions about drilling and production operations. The record of the measurements, typically a long strip of paper, is also called a log. Measurements include electrical properties (resistivity and conductivity at various frequencies), sonic properties, active and passive nuclear measurements, dimensional measurements of the wellbore, formation fluid sampling, formation pressure measurement, wireline-conveyed sidewall coring tools, and others. For wireline measurements, the logging tool (or sonde) is lowered into the open wellbore on a multiple conductor, contra-helically armored wireline cable. Once the tool string (link to ID 2964) has reached the bottom of the interval of interest, measurements are taken on the way out of the wellbore. This is done in an attempt to maintain tension on the cable (which stretches) as constant as possible for depth correlation purposes. (The exception to this practice is in certain hostile environments in which the tool electronics might not survive the downhole temperatures for long enough to allow the tool to be lowered to the bottom of the hole and measurements to be recorded while pulling the tool up the hole. In this case, "down log" measurements might be conducted on the way into the well, and repeated on the way out if possible.) Most wireline measurements are recorded continuously while the sonde is moving. Certain fluid sampling and pressure-measuring tools require that the sonde be stopped, increasing the chance that the sonde or the cable might become stuck. Logging while drilling (LWD) tools take measurements in much the same way as wireline-logging tools, except that the measurements are taken by a self-contained tool near the bottom of the bottomhole assembly and are recorded downward (as the well is deepened) rather than upward from the bottom of the hole.

LUBRICATOR - A long, high-pressure pipe fitted to the top of a wellhead or Christmas tree so that tools may be put into a high-pressure well. The top of the lubricator assembly includes a high-pressure grease-injection section and sealing elements. The lubricator is installed on top of the tree and tested, the tools placed in the lubricator and the lubricator pressurized to wellbore pressure. Then the top valves of the tree are opened to enable the tools to fall or be pumped into the wellbore under pressure. To remove the tools, the reverse process is used: the tools are pulled up into the lubricator under wellbore pressure, the tree valves are closed, the lubricator pressure is bled off, and then the lubricator may be opened to remove the tools.

MAKEUP - To tighten threaded connections.

MAST - The structure used to support the crown block and the drillstring. Masts are usually rectangular or trapezoidal in shape and offer a very good stiffness, important to land rigs whose mast is laid down when the rig is moved. They suffer from being heavier than conventional derricks and consequently are not usually found in offshore environments, where weight is more of a concern than in land operations.

MOONPOOL - The opening in the hull of a drillship or other offshore drilling vessel through which drilling equipment passes.

NIPPLE - Any short piece of pipe, especially if threaded at both ends with male threads.

OPERATOR - The company that serves as the overall manager and decision-maker of a drilling project. Generally, but not always, the operator will have the largest financial stake in the project. At the successful completion of logging the target zones, the decision to complete or plug and abandon generally has partner input and potential override clauses. As far as the drilling contractor and service companies are concerned, the designated operator is paying for the entire operation, and the operator is responsible for recouping some of that expense from the partners.
DEFINITIONS

PACKER - A device that can be run into a wellbore with a smaller initial outside diameter that then expands externally to seal the wellbore. Packers employ flexible, elastomeric elements that expand. The two most common forms are the production or test packer and the inflatable packer. The expansion of the former may be accomplished by squeezing the elastomeric elements (somewhat doughnut shaped) between two plates, forcing the sides to bulge outward. The expansion of the latter is accomplished by pumping a fluid into a bladder, in much the same fashion as a balloon, but having more robust construction. Production or test packers may be set in cased holes and inflatable packers are used in open or cased holes. They may be run on wireline, pipe or coiled tubing. Some packers are designed to be removable, while others are permanent. Permanent packers are constructed of materials that are easy to drill or mill out.

PILL - Any relatively small quantity (less than 200 bbl) of a special blend of drilling fluid to accomplish a specific task that the regular drilling fluid cannot perform. Examples include high-viscosity pills to help lift cuttings out of a vertical wellbore, freshwater pills to dissolve encroaching salt formations, pipe-freeing pills to destroy filter cake and relieve differential sticking forces and lost circulation material pills to plug a thief zone.

POOH - Abbreviation for pull out of the hole. To remove the drillstring from the wellbore.

RATHOLE - A storage place for the kelly, consisting of an opening in the rig floor fitted with a piece of casing with an internal diameter larger than the outside diameter of the kelly, but less than that of the upper kelly valve so that the kelly may be lowered into the rathole until the upper kelly valve rests on the top of the piece of casing.

RIGDOWN - To take apart equipment for storage and portability. Equipment typically must be disconnected from power sources, decoupled from pressurized systems, disassembled and moved off the rig floor or even off location.

ROTARYTABLE - The revolving or spinning section of the drillfloor that provides power to turn the drillstring in a clockwise direction (as viewed from above). The rotary motion and power are transmitted through the kelly bushing and the kelly to the drillstring. When the drillstring is rotating, the drilling crew commonly describes the operation as simply, "rotating to the right," "turning to the right," or, "rotating on bottom." Almost all rigs today have a rotary table, either as primary or backup system for rotating the drillstring. Topdrive technology, which allows continuous rotation of the drillstring, has replaced the rotary table in certain operations. A few rigs are being built today with topdrive systems only, and lack the traditional kelly system.

ROUSTABOUT - Any unskilled manual laborer on the rigsite. A roustabout may be part of the drilling contractor's employee workforce, or may be on location temporarily for special operations. Roustabouts are commonly hired to ensure that the skilled personnel that run an expensive drilling rig are not distracted by peripheral tasks, ranging from cleaning up location to cleaning threads to digging trenches to scraping and painting rig components. Although roustabouts typically work long hard days, this type of work can lead to more steady employment on a rig crew.

SHAKER - Abbreviation for shale shaker, the primary and probably most important device on the rig for removing drilled solids from the mud. This vibrating sieve is simple in concept, but a bit more complicated to use efficiently. A wire-cloth screen vibrates while the drilling fluid flows on top of it. The liquid phase of the mud and solids smaller than the wire mesh pass through the screen, while larger solids are retained on the screen and eventually fall off the back of the device and are discarded. Obviously, smaller openings in the screen clean more solids from the whole mud, but there is a corresponding decrease in flow rate per unit area of wire cloth. Hence, the drilling crew should seek to run the screens (as the wire cloth is called), as fine as possible, without dumping whole mud off the back of the shaker. Where it was once common for drilling rigs to have only one or two shale shakers, modern high-efficiency rigs are often fitted with four or more shakers, thus giving more area of wire cloth to use, and giving the crew the flexibility to run increasingly fine screens.
DEFINITIONS

SHEAVE - A pulley. In oilfield usage, the term usually refers to either the pulleys permanently mounted on the top of the rig (the crown blocks), or the pulleys used for running wireline tools into the wellbore. In the case of the crown blocks, the drilling line, a heavy wire rope, is threaded between the crown blocks and the traveling blocks in a block and tackle arrangement to gain mechanical advantage. A relatively weak drilling line, with a breaking strength of perhaps 100,000 pounds [45,400 kg], may be used to lift much larger loads, perhaps in excess of one million pounds [454,000 kg]. During wireline operations, two sheaves are temporarily hung in the derrick, and the wireline is run from the logging truck through the sheaves and then down to the logging tool in the wellbore.

SHOE - The bottom of the casing string, including the cement around it, or the equipment run at the bottom of the casing string.

SIDETRACK - To drill a secondary wellbore away from an original wellbore. A sidetracking operation may be done intentionally or may occur accidentally. Intentional sidetracks might bypass an unusable section of the original wellbore or explore a geologic feature nearby. In the bypass case, the secondary wellbore is usually drilled substantially parallel to the original well, which may be inaccessible due to an irretrievable fish, junk in the hole, or a collapsed wellbore.

SLIPS - A device used to grip the drillstring in a relatively nondamaging manner and suspend it in the rotary table. This device consists of three or more steel wedges that are hinged together, forming a near circle around the drillpipe. On the drillpipe side (inside surface), the slips are fitted with replaceable, hardened tool steel teeth that embed slightly into the side of the pipe. The outsides of the slips are tapered to match the taper of the rotary table. After the rig crew places the slips around the drillpipe and in the rotary, the driller slowly lowers the drillstring. As the teeth on the inside of the slips grip the pipe, the slips are pulled down. This downward force pulls the outer wedges down, providing a compressive force inward on the drillpipe and effectively locking everything together. Then the rig crew can unscrew the upper portion of the drillstring (kelly, saver sub, a joint or stand of pipe) while the lower part is suspended. After some other component is screwed onto the lower part of the drillstring, the driller raises the drillstring to unlock the gripping action of the slips, and the rig crew removes the slips from the rotary.

SURVEY - A completed measurement of the inclination and azimuth of a location in a well (typically the total depth at the time of measurement). In both directional and straight holes, the position of the well must be known with reasonable accuracy to ensure the correct wellbore path and to know its position in the event a relief well must be drilled. The measurements themselves include inclination from vertical, and the azimuth (or compass heading) of the wellbore if the direction of the path is critical. These measurements are made at discrete points in the well, and the approximate path of the wellbore computed from the discrete points. Measurement devices range from simple pendulum-like devices to complex electronic accelerometers and gyroscopes used more often as MWD becomes more popular. In simple pendulum measurements, the position of a freely hanging pendulum relative to a measurement grid (attached to the housing of the tool and assumed to represent the path of the wellbore) is captured on photographic film. The film is developed and examined when the tool is removed from the wellbore, either on wireline or the next time pipe is tripped out of the hole.

SWAB - To reduce pressure in a wellbore by moving pipe, wireline tools or rubber-cupped seals up the wellbore. If the pressure is reduced sufficiently, reservoir fluids may flow into the wellbore and towards the surface. Swabbing is generally considered harmful in drilling operations, because it can lead to kicks and wellbore stability problems. In production operations, however, the term is used to describe how the flow of reservoir hydrocarbons is initiated in some completed wells.

TEXASDECK - On an offshore jackup drilling rig, the deck below the rotary table and rig floor where workers can access the BOP stack. This platform surrounds the base of the BOP stack and is suspended from the cantilever (where the rig floor is located) by adjustable cables. It is accessed from the main deck of the jackup barge by a semipermanent stairwell. The Texas deck is used primarily for installing the wellhead and nipping the BOP stack up and down.
DEFINITIONS

TONGS - Large-capacity, self-locking wrenches used to grip drillstring components and apply torque. As with opposing pipe wrenches for a plumber, the tongs must be used in opposing pairs. As a matter of efficiency, one set of tongs is essentially tied off with a cable or chain to the derrick, and the other is actively pulled with mechanical catheads. The breakout tongs are the active tongs during breakout (or loosening) operations. The makeup tongs are active during makeup (or tightening) operations.

TOOLPUSHER - The location supervisor for the drilling contractor. The toolpusher is usually a senior, experienced individual who has worked his way up through the ranks of the drilling crew positions. His job is largely administrative, including ensuring that the rig has sufficient materials, spare parts and skilled personnel to continue efficient operations. The toolpusher also serves as a trusted advisor to many personnel on the rigsite, including the operator's representative, the company man.

TOTALDEPTH - The end of the well, measured by the length of pipe required to reach the bottom.

TURNKEY - A type of financing arrangement for the drilling of a wellbore that places considerable risk and potential reward on the drilling contractor. Under such an arrangement, the drilling contractor assumes full responsibility for the well to some predetermined milestone such as the successful running of logs at the end of the well, the successful cementing of casing in the well or even the completion of the well. Until this milestone is reached, the operator owes nothing to the contractor. The contractor bears all risk of trouble in the well, and in extreme cases, may have to abandon the well entirely and start over. In return for assuming such risk, the price of the well is usually a little higher than the well would cost if relatively trouble free. Therefore, if the contractor succeeds in drilling a trouble-free well, the fee added as contingency becomes profit. Some operators, however, have been required by regulatory agencies to remedy problem wells, such as blowouts, if the turnkey contractor does not.

UNDERBALANCE - The amount of pressure (or force per unit area) exerted on a formation exposed in a wellbore below the internal fluid pressure of that formation. If sufficient porosity and permeability exist, formation fluids enter the wellbore. The drilling rate typically increases as an underbalanced condition is approached.

UPSET - A part at the end of tubulars, such as drillpipe, casing or other tubing, which has extra thickness and strength to compensate for the loss of metal in the threaded ends.

VEEDOOR - The upside down V-shaped opening in one side of the derrick that enables long pipes and tools to be lifted into the interior of the derrick. This opening is aligned with the slide and catwalk of the rig.

WASHOUT - An enlarged region of a wellbore. A washout in an openhole section is larger than the original hole size or size of the drill bit. Washout enlargement can be caused by excessive bit jet velocity, soft or unconsolidated formations, in-situ rock stresses, mechanical damage by BHA components, chemical attack and swelling or weakening of shale as it contacts fresh water. Generally speaking, washouts become more severe with time. Appropriate mud types, mud additives and increased mud density can minimize washouts.

WEEVIL - A new, completely inexperienced member of the drilling crew. Such a crewmember is stereotyped as prone to making mistakes and being injured, and typically endures pranks played on him by the drilling crew. While the terms weevil and its close cousin, worm, are used widely, they are labels of inexperience, rather than derogatory terms.

WELLBORE - The drilled hole or borehole, including the openhole or uncased portion of the well. Borehole may refer to the inside diameter of the wellbore wall, the rock face that bounds the drilled hole.

WILDCAT - An exploration well. The significance of this type of well to the drilling crew and well planners is that by definition, little if anything about the subsurface geology is known with certainty, especially the pressure regime. This higher degree of uncertainty necessitates that the drilling crews be appropriately skilled, experienced and aware of what various well parameters are telling them about the formations they drill. The crews must operate top-quality equipment, especially the blowout preventers, since a kick could occur at virtually any time. If a wildcat is especially far from another wellbore, it may be described as a "rank wildcat."
DEFINITIONS

WORM - A new, completely inexperienced member of the drilling crew. Such a crewmember is stereotyped as prone to making mistakes and being injured, and typically endures pranks played on him by the drilling crew. While the terms weevil and its close cousin, worm, are used widely, they are labels of inexperience, rather than derogatory terms.

YIELD - The volume occupied by one sack of dry cement after mixing with water and additives to form a slurry of a desired density. Yield is commonly expressed in US units as cubic feet per sack (cu. ft./sk).

ZIPGROOVE - A reduced-diameter section that has been machined at the box (up) end of a drill collar (usually a straight drill collar) so that the collar may be more easily handled with open-and-close elevators. The elevators close around the reduced-diameter section, latch securely, and a shoulder on the elevators prevents the larger diameter end of the collar from passing through the elevators, so the collars can be lifted. If zip grooves are not used on the collars, special lifting subs must be threaded into each stand of collars for lifting, which is time-consuming and less efficient than zip grooves. The primary drawback to zip grooves is that they may reduce the life of the collar by putting an effective limit on how many times the collar threads may be recut.
Did you know you can learn things in your spare time with Webinars? These are available on the ADDC website: http://www.addc.org/education_webinars.htm
Big Data or Small Data - in Today’s Oilfield Everything is Important

April 28, 2015 by John Fierstien

If the title didn’t grab you, you either don’t work in the oil industry or your existence in the industry is amazingly unique and sheltered. For the rest of us, data is the lifeblood that allows us to find and produce oil and gas.

I’m not sure there is another industry that collects more data than we do – both in volume and in detail.

Like many companies that serve the oil and gas industry Drillinginfo does many different things in support of our customers. We do analytics and provide high end answers to our customers. We provide desktop solutions so customers can analyze data and come up with their own answers to tough questions. However, we sometimes take for granted the thing that allows us and our customers to do all this analysis is – the data. Data is the foundation of Drillinginfo, it is where we came from and it is the fuel that powers our decision engines.

In this post (part 1 of two) I’m going to give you a tiny glimpse into the world of oil and gas data at Drillinginfo – there are hundreds of talented and gifted people at Drillinginfo that work tirelessly collecting, analyzing, processing, error checking and loading data into our databases.

Data - where does it all come from?

It is amazing all the places we get oil and gas data from. You might instantly think of federal, state, and local/county governments. However, that is just the tip of the story. Drillinginfo is a worldwide corporation and we collect information on oil and gas operations in almost every part of the world.

In the early days of the industry oil scouts traded information on wells and field production. The early pioneers of the industry quickly realized that the more data they shared the more they learned. Today there are still oil scouts, but regulation and reporting at a state level here in the US makes a lot of that information better available.

Internationally, however, that is not the case. Drillinginfo has a team of amazing individuals who collect information from all over the world. Our team of international scouts are based around the globe and are bringing detailed regional coverage into the DI database every week [click here for a free example international scout report].
Here in the US, of course, we get a lot of information from the state and local governments whose job it is to regulate the industry. Some of this data comes to us digitally, but a lot of it comes to us on paper or the digital equivalent of paper – an image file. Most state and county offices still keep track of wells and leases – on paper. In most cases, we collect this data by scanning it and converting the resulting image to meaningful information that can be searched, indexed, posted on a map and analyzed.

What a lot of people don’t know is that when we find problems with this data we often correct it and share it back with the state agency.

We also work with vendors and have partnerships with other data collectors. Not everyone can be an expert in everything so when there is a vendor who has expertise and passion for quality data we will often partner with them (if it is in the best interest for both companies).

It is also amazing how much data is being given to us. As the oil and gas industry goes digital there is great pressure to get rid of paper records. This is happening at the same time many in the industry are thinking about retiring. We have a large processing facility just west of Austin where we process and scan logs and scout tickets so they can be saved from the paper shredder. The historical information about past wells sometimes can be more valuable than recent activity.

The number of documents we handle each week depends on activity and the specific information we are collecting; at times, however, Drillinginfo has processed over 2 million documents in a single week.

Data - what do we do with it?

In a nutshell – virtually all Drillinginfo data goes on the web for our customers. When possible or practical we try to make available any document that was used in the collection of the data. For example, copies of the actual drilling permits are often available as an image in case there is any question you can easily refer to the source document.

There are dozens of teams inside Drillinginfo whose job it is to handle a specific type of data such as lease polygons or drilling permits. When it comes to drilling permits, for example, we collect information from all states in the US that have oil and gas operations. Each state has its own permitting form and rules and regulations that surround the permitting of a well. There are about 35 states in the US that have active oil and gas operations. Add 200+ countries and joint country areas and this is a huge number of moving parts and pieces that are all different just to keep track of one thing – new wells across the globe.

Like a well-oiled machine Drillinginfo adds this information from all over the world to its repositories and makes it available almost the instant we add it. The web makes it easy and users have nothing to do to see the updated data – other than perhaps hitting refresh on their browser.

Permits and new wells are just a tiny example of the data we are constantly collecting – well events, directional surveys, completions, completion details, plugging, raster logs, LAS logs, scout cards, contracts and leases, bids, lease polygons, court house lease documents, production, field information and infrastructure information are just a part of what we collect.
We also provide what I call analytical data that is provided by people with special insight or technical expertise. Such data includes editorial analysis, log tops, graded acreage analysis, other types of maps in major plays and lots of other types of data and analysis, graphs, charts and map layers that would take pages to list.

Despite the fact we are processing data all the time, we are somewhat restricted by the delays and release schedule of various agencies. These vary greatly depending on what state and agency we are working with. Probably the most noticeable is production data which can vary from days to months.

The bulk of the employees that work for Drillinginfo are directly engaged in gathering, processing, analyzing and making the data available to customers.

Next week, in part two we will explore some of the teams that collect, ingest, process and QA the many types of data that we use to fuel our decision-making platforms.

**John Fierstien**

*John Fierstien is the Director of Data Inventory. He has worked as a geologist for several E&P companies and as someone who has been helping to create some of the best tools for geologists and geophysicists to help them find oil and gas. He received his Bachelor of Science in Biology and Geology from Central Michigan University and his Master of Science in Geology from the University of Pittsburgh.*
May 1, 2015

To: All Club Presidents

From: 2015 ADDC Nominating Committee

Re: Nominations for 2016 ADDC Officers

This is a final reminder for your club to submit nominations for 2016 Officers of the Association of Desk and Derrick Clubs. The officers will be elected at the 2015 ADDC Convention to be held in Lubbock, Texas. The ADDC Nominating Committee is looking for nominations for the following 2016 ADDC Officers:

   President-Elect  
   Vice President  
   Secretary  
   Treasurer  

The deadline for all nominations to be received by the Nominating Committee Chairman is June 5, 2015. Any nominations received after that date will not be considered.

Requirements and procedures for submitting nominations and the duties of the Officers are described in the Association Bylaws and can be found on the ADDC website in the Manuals section. All candidates for nomination to ADDC offices shall:

1. Have served or be serving as Regional Director  
2. Be employed in the petroleum, energy or allied industries  
3. Be bondable.

You can get the ADDC Officer Nomination Forms in the Forms section of the Members Only pages of the ADDC website (addc.org) or e-mail Judi Adams (at dannd.judi@gmail.com) for the forms.

The region meetings are in full swing and the 2016 Region Directors are being selected within in each region. This letter also serves as a reminder that incumbent Region Directors and the 2016 Directors-Elect should promptly complete the ADO40 form and send it in according to directions. The form is also available in the “Members Only” section of the ADDC website (https://www.addc.org/secure_members/documents/members_forms/Rdinfo-ADO40.pdf).

Remember to send all nominations by the June 5, 2015 deadline, including NOMM1, NOMN2, and NOMN2A forms, along with photo of candidates to Judi Adams, Nominating Committee Chairman, via mail (no signature required, if tracking method used, please) at the address above or via e-mail at dannd.judi@gmail.com.

Cc: Lori Landry, 2016 Nominating Committee
# About Our Association

## 2015 ADDC Board of Directors

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Lori Landry</td>
<td><a href="mailto:llandry@beanresources.com">llandry@beanresources.com</a></td>
</tr>
<tr>
<td>President Elect</td>
<td>Connie Harrison</td>
<td><a href="mailto:connie.harrison@valero.com">connie.harrison@valero.com</a></td>
</tr>
<tr>
<td>Vice President</td>
<td>Maggi Franks</td>
<td><a href="mailto:maggsmf@aol.com">maggsmf@aol.com</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Mark Loch</td>
<td><a href="mailto:mark.loch@me.com">mark.loch@me.com</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Christina Forth-Matthews</td>
<td><a href="mailto:christina@aoginternational.com">christina@aoginternational.com</a></td>
</tr>
<tr>
<td>Immediate Past President</td>
<td>Linda Rodgers</td>
<td><a href="mailto:lindar@pescoinc.biz">lindar@pescoinc.biz</a></td>
</tr>
<tr>
<td>Executive Assistant</td>
<td>Dorothy Semon</td>
<td><a href="mailto:dsemon1@comcast.net">dsemon1@comcast.net</a></td>
</tr>
<tr>
<td>Parliamentarian</td>
<td>Sheryl Minear</td>
<td><a href="mailto:sheryl_minear@yahoo.com">sheryl_minear@yahoo.com</a></td>
</tr>
<tr>
<td>ADO Manager</td>
<td>Andre’ Martin</td>
<td><a href="mailto:ado@addc.org">ado@addc.org</a></td>
</tr>
<tr>
<td>Region I Director</td>
<td>Penny Jacobs</td>
<td><a href="mailto:pjacobs@rangeresources.com">pjacobs@rangeresources.com</a></td>
</tr>
<tr>
<td>Region II Director</td>
<td>Debra Perjak</td>
<td><a href="mailto:d.perjak@yahoo.com">d.perjak@yahoo.com</a></td>
</tr>
<tr>
<td>Region III Director</td>
<td>Val Blanchard</td>
<td><a href="mailto:v.mullen.pfc@glaxoxmail.com">v.mullen.pfc@glaxoxmail.com</a></td>
</tr>
<tr>
<td>Region IV Director</td>
<td>Cindy Miller</td>
<td><a href="mailto:miller154@suddenlink.net">miller154@suddenlink.net</a></td>
</tr>
<tr>
<td>Region V Director</td>
<td>Kate Ediger</td>
<td><a href="mailto:kate.ediger@gmail.com">kate.ediger@gmail.com</a></td>
</tr>
<tr>
<td>Region VI Director</td>
<td>Anna Lewis-McBeth</td>
<td><a href="mailto:amcbeth95@gmail.com">amcbeth95@gmail.com</a></td>
</tr>
<tr>
<td>Region VII Director</td>
<td>Deborah Porath</td>
<td><a href="mailto:dporath@undergroundpipe.ca">dporath@undergroundpipe.ca</a></td>
</tr>
</tbody>
</table>

## Our Motto, Purpose and Mission

### MOTTO

Greater Knowledge ~ Greater Service

### PURPOSE

The purpose of this club shall be to promote the education and professional development of individuals employed in or affiliated with the petroleum, energy and allied industries and to educate the general public about these industries.

### MISSION STATEMENT

To enhance and foster a positive image to the global community by promoting the contributions of the petroleum, energy and allied industries through education, by using all resources available.