



Newsletter

Foam Fracturing and Design Principles in Arkansas

Foam Fracturing and Design Principles in Arkansas will be the February technical presentation by David C. Nicholson of Cudd Energy Services at the SPE Central Arkansas Study Group meeting on Thursday, February 18th at 11:30 a.m. in the Faulkner County Natural Resources Center meeting hall at 110 S. Amity Rd. in Conway.

Lunch for the meeting is being provided by Cudd and the cost of the meeting hall is covered by our study group's Platinum Sponsor, Southwestern Energy. Consequently, there is no cost for the meeting. Information about our sponsoring companies is provided later in this newsletter.

Historically, Slick Water Fracs have been very common in central Arkansas's Fayetteville Shale Play. However, Foam Fracs offer several potential advantages over Slick Water as a frac fluid. These advantages include:

- Large volumes of water are kept out of the target formation by using a smaller amount of water, foaming agent, and nitrogen gas.
- Easier clean up due to the stored energy of the nitrogen gas in the frac fluid.
- Excellent proppant carrying and placement characteristics.



Reducing the amount of water in the frac fluid has several advantages by itself. Not only is the exposure of sensitive shale and siltstone formations to water reduced thereby decreasing potential formation swelling and plugging, but the volume of water that must be hauled to and from the well site is reduced, the volume of water left trapped in the formation is less, and the potential volume of water required for handling during the flowback process is less.

Foam fracing technology was first developed over 30 years ago and tested in shale and siltstone formations of the Appalachian Basin. Mr. Nicholson, will be addressing specific frac design principles for 21st Century Foam Fracturing that should be considered in Arkansas. Although frequently associated with excellence through many years in well control, Cudd is an industry leader in other energy services including well stimulations and Foam Fracturing in particular.

Meet our February speaker: David C. Nicholson

David C. Nicholson, Cudd Energy Services' Division Engineer for Arkansas Operations came to Cudd with the company's acquisition of Matthews Energy.

After earning a Bachelor of Science degree in engineering from the University of Arkansas Fayetteville, Nicholson began 19 years with Halliburton during which he served as a field engineer, sales services engineer, assistant district manager and technical sales manager. Next Nicholson founded Vector Resources, Inc., a petroleum engineering and production company. In 1998, he joined Matthews as its Arkansas operations engineer.

Nicholson has also made technical presentations at the University of Tulsa, the University of Oklahoma, and the Society of Petroleum Engineers. When he isn't working for Cudd or serving as chairman of Vector Resources, Nicholson, a Fort Smith resident, may be found playing the guitar, writing a novel, or relaxing on his ranch near Natural Dam, AR.

Featured Study Group Member: JJ Simonsen

By Ronald R. Walsmith and Donna S. Gentry

By his own admission, SPE Central Arkansas Study Group member JJ Simonsen says that he has accomplished "roughly half" of what he intends for his lifetime. Included in those achievements thus far has been:

". . . graduating from the Best College in the Country (www.usatoday.com/.../2009-08-05-forbes-colleges-west-point_N.htm), I guess you could probably add my two tours in Iraq for a combined total of 28 months as a Command during the initial seizure of Baghdad in 2003 and in support of General Petraeus' Surge Strategy in 2007 to retake the country from the clutches of the terrorists."

Not only does JJ sound like a man who takes seriously the defense of his country, but he comes from a military family. Born at Fort Hood, TX in Darnell Army Hospital, his parents now live in Overland Park, KS. His father is a defense contractor at Fort Leavenworth, KS. His sister and her husband live at Fort Hood with his brother in law serving a third tour with the US Army in Iraq.

However, graduating West Point required determination and perseverance for this Eagle Scout.

Upon graduating high school, JJ was on his way to either West Point or the US Air Force Academy when his left foot was crushed in a motorcycle accident. With the service academies out of the picture, JJ joined the US Army. After joining the Army and completing basic training, he received an ROTC scholarship and another shot at West Point. This time West Point tested his academic stamina with 26 hours of classes each semester.



"They find your limits and test them to see how far they can push those limits," said JJ of West Point. After West Point and Officers Basic Training at Fort Knox, he began US Army Ranger training at Fort

Benning, GA. But before the young lieutenant could finish Ranger School with an hour of sleep frequently followed by a 10 mile march with full gear and weapon and other physical challenges, JJ got word from his Battalion Commander at Fort Hood:

“Get down here. We’re going to war!”

So, in March of 2003, the West Point grad found himself in Operation Iraqi Freedom as a platoon leader with the 4th Infantry. After a over year in Iraq, JJ returned to complete Ranger School as well as the Captains Career Course. JJ also met and married his wife Piper. In 2007 with Piper expecting their first child, JJ was once again sent to Iraq, but this time he was Commander of Bandit Troop, 1st Squadron, 4th Cavalry. He was assigned to the Rashid Security District of Baghdad, the most dangerous area of the city.

During JJ’s first month back in Iraq, 100 people were murdered by terrorists in the district. He said that the terrorists would drag people from their homes and execute them while their families watched. The former platoon leader said that within 8 months, the US Army had cleaned up that area of Baghdad.

“People were walking down the streets again, kids were playing soccer, and markets were thriving, all of which was unheard of months earlier. They (the Iraqi people) no longer considered the insurgents to be Freedom Fighters, but instead saw them as obstacles to peace and democracy. Changing that perception was a huge accomplishment for us,” said JJ.

In 2008, after a near death experience in Iraq, more than a decade of serving his country and a desire to spend more time with his wife and son Jackson Wayne, who was born a year earlier, the Army Captain left active duty military service. However, he still is serving his country as a member of the Arkansas National Guard.

After considering several employment opportunities, JJ chose to join Chesapeake Energy as a field engineer. The combat veteran said that Chesapeake had all of the things that he was looking for.

In comparing Chesapeake to the military, the West Point engineering grad said that both:

“. . . have an excellent support system”, “. . . reward hard work”, and require “the passion and internal drive to do the right thing when no one is looking.” He continued that both also require a “certain degree of selfless service”

JJ not only graduated West Point with a BS in Engineering but his emphasis was on Environmental Engineering and Business Management. JJ said that his transition and industry mentors were important to his new career in the petroleum industry. His transition mentor was his former troop commander, Charles G. Thrash, who is a Shell Oil Company Refinery Plant Manager in North Carolina. At Chesapeake JJ’s mentors have been Richard Thompson and Rolly Torres in drilling, Kirk Smith in completions, and Mike Churchwell in production.

“My ultimate career goal is to be a Division VP for Chesapeake,” said JJ when asked about what he wants to achieve during his petroleum career.

Does JJ have a life outside of Chesapeake? Well there is Piper and Jackson Wayne and they are a very high priority in his life. But JJ said that he also enjoys all sporting activities including running, biking, lifting weights, football, basketball, and combatatives. Combatatives has multiple levels and

was developed by the US Army as a training tool with the highest level being a type of mixed martial arts. Recently, combatatives has also become a sport with schools having been created for the public.

"I like to spend some time on the golf course during the weekends and go on family bike rides when the weather is nice. I regularly occupy myself with home improvement projects, tinkering with my automobiles, dog walks, playing with the kiddo, reading fitness and petroleum industry magazines, and playing video games with the family on the Wii," said the field engineer. JJ's three year old dog, a Weimaraner, is named Scout Riley.

Featured Study Group Member: Andrew Whiteneck

By Ronald R. Walsmith and Donna S. Gentry

Like Cudd Energy Services, Andrew Whiteneck got his start in life in northwest Oklahoma. Born in Fairview, an hour or less east of Woodward, he graduated from Oklahoma State University in Stillwater with a Bachelor of Science degree in Mechanical Engineering Technology.

Although Andrew began with Chesapeake Energy just last month, he did an internship with the company in 2009 and worked for Basic Energy Services as a frac hand during the summer of 2008. At his relatively new position with Chesapeake, the OSU Cowboy replaces JJ Simonsen who has been training him for several weeks.

"My current position entails managing water movement around the Fayetteville Shale. This includes taking care of salt water disposals, reusing water in fracs, and so forth," said the new field engineer.

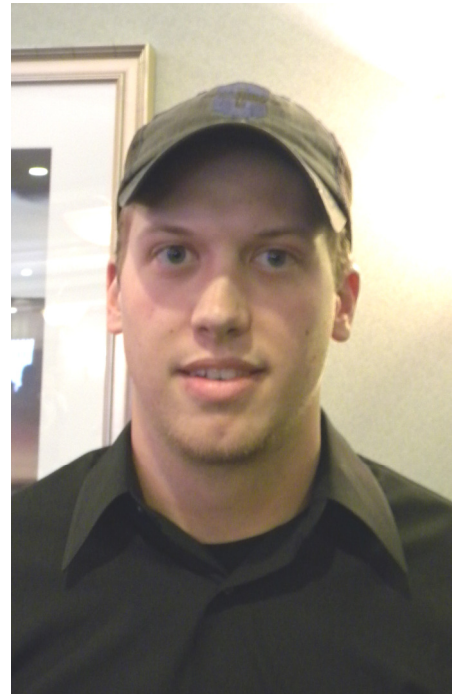
Andrew gives his father-in-law credit for encouraging him to work for an oil field services company while he was still in college. He said it was his experience with a Basic Energy Services that motivated him to apply for the internship with Chesapeake.

"I was lucky enough that Chesapeake offered me an internship at the Waynoka, OK, field office which ultimately led to my full time position in White Country and the Fayetteville Shale Play, said the engineer. The Waynoka regional office is that part of Oklahoma where the wind almost always "comes rushing over the plain." It is between Fairview and Woodward.

Andrew and his wife now live in Searcy with their two dogs, a Labrador Retriever and a Miniature Schnauzer.

"We don't have any kids currently but we plan to have some in the future," said the newly planted Arkansan when asked about children. His extended family lives in northwest Oklahoma and central Kansas.

"My hobbies include hunting, fishing, golf, and working with the dog." said the avid outdoorsman.



About Our Luncheon Sponsor

Cudd Energy Services was founded in 1977 as Cudd Pressure Control in Woodward, OK, by one of the legends of the oil and gas industry, Bobby Joe Cudd who made name for himself in fighting well fires. By 1978, Cudd had expanded its operations into Wyoming. By the time Cudd was acquired by Rollins in 1980, it also had operations in Texas and Louisiana.

Today, Cudd Energy Services is part of a large publicly traded company, RES on the NYSE, and known as one of the premier services and well intervention companies in the petroleum industry. Cudd's services include not only stimulation, hydraulic workover, nitrogen, and coiled tubing, but also wireline, electric line, hot tapping, freezing, gate valve drilling and industrial nitrogen. Cudd's Arkansas operations are based out of their regional headquarters and yard in Livonia, AR.

More information about CUDD Energy and the services they offer can be found at their website: www.CUDD.com. Please take time to thank a representative from CUDD for the lunch.

About Our Meeting Sponsor

Southwestern Energy, our Platinum Sponsor of the SPE Central Arkansas Study Group, not only is one of the nation's premier energy companies, but the most active company in drilling and producing Fayetteville Shale gas wells. Recognized as the first company to drill commercial wells in the Central Arkansas Fayetteville Shale Play, Southwestern traces its root back to the Arkansas Western Gas Co.

Last year Southwestern Energy passed the billion cubic feet per day mark for production from the Fayetteville Shale. Southwestern, is publicly traded on the NYSE as SWN. Its regional headquarters are in Conway, AR. Southwestern is also a national company with other operations in Oklahoma, Pennsylvania, and Texas. Southwestern Energy has been recognized for its philanthropy and as a outstanding corporate citizen.

More information about Southwestern Energy can be found at their website: www.swn.com. Are warmest thanks goes out to Southwestern Energy for their sponsorship.

SPE Central Arkansas Study Group meeting for March

The SPE Central Arkansas Study Group technical meeting for March will be presented by Bear Creek Services. They will discuss their new technology for treating water. Details for the March meeting will be announced at the Thursday, February 18th meeting at 11:30 a.m. at the Faulkner County Natural Resources Center, 110 Amity Road in Conway.

Have a Story for the SPE Central Arkansas Study Group Newsletter?

If you have news or want to feature a story for the SPE Central Arkansas Study Group Newsletter, please email our newsletter editor, Donna S. Gentry, at dgentry@awac-llc.com.