

SOCIETY OF PETROLEUM ENGINEERS

Wyoming Petroleum Section
Mike Bingle-Davis, Secretary
P.O. Box 2154
Casper, WY 82602-2154



Section Website For Latest News:
<http://wyoming.spe.org/>

2016-2017 Wyoming Petroleum Section				
Section Chairman	Dave Chase	BLM	261-7685	dchase@blm.gov
Treasurer	Julie Cruse	Scientific Drilling	472-6621	julie.cruse@scientificdrilling.com
Scholarship Chair	Luke Opitz	Power Service	258-5075	lopitz@powerserviceinc.com
Program Chairman	Dave Chase	BLM	261-7685	dchase@blm.gov
Secretary	Mike Bingle-Davis	Kirkwood Oil and Gas	577-5311	mikeb@kirkwoodcompanies.com
Continuing Education	Trayce Rauscher	WYOGCC	234-7147	trayce.rauscher@wyo.gov
Membership Chair	Sabrina Hamner	WYOGCC	234-7147	sabrina.hamner@wyo.gov

GOLD SPONSORS



Rocky Mountain Oilfield
Warehouse

TCF Services Inc.

TCF Services Inc.



Fab Tech

SILVER SPONSORS



Wesco Operating, Inc.



Denbury Resources,
Inc.

Fischer Consulting

Fischer Consulting
LLC.



Gene R. George &
Associates, Inc.



Quest Drilling Fluids,
Inc.



Qdoba Mexican Eats

BRONZE SPONSORS

Borah Borah
Petroleum

Extreme Petroleum
Technology, Inc.



UPCOMING AREA MEETINGS

WYOMING GEOLOGICAL ASSOCIATION – All meetings at either the Lyric or Ramada (see Calendar Page). Lunch Buffet served from 11:15 to 12:00 at a cost of \$13.00. Contact the WGA office at 237-0027 for more information or to make reservations.

November 4, 2016 : Karl Osvald – Bureau of Land Management – Meteorites – **LYRIC**

November 11, 2016 : Con Trumble – Bureau of Land Management – Veterans Day Luncheon - **LYRIC**

November 18, 2016: Neal Nagel (SPE) – Oilfield Geomechanics LLC – Stress Shadows: How and Why they Can Affect Hydraulic Fracturing in Both Conventional and Unconventional Shale Plays - **RAMADA**

November 25, 2016: NO MEETING - Thanksgiving

UPCOMING MONTHLY PRESENTATIONS FOR THE SPE WYOMING PETROLEUM SECTION

November 18, 2016: Neal Nagel – Oilfield Geomechanics LLC – Stress Shadows: How and Why They can Affect Hydraulic Fracturing in Both Conventional and Unconventional Shale Plays

December 7, 2016: SPE/WGA Christmas Party

January, 2017: Steve Mackie – Santos Ltd. – Dry Hole Analysis: What I have Learnt about the Upstream Petroleum Industry from my Failures

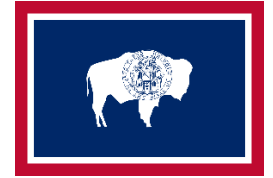




Society of Petroleum Engineers

Wyoming Petroleum Section October 2016 Newsletter

<http://wyoming.spe.org/>



When:	Friday, November 18, 2016
Where:	Ramada
Time:	11:15 AM (\$13.00 for buffet lunch)

Please notify Dave Chase at 261-7685 by noon on Tuesday, November 15, 2016 if you plan to attend. Please utilize this service so that we can give the Ramada an accurate headcount.

Event: Neal Nagel, Oilfield Geomechanics LLC – Stress Shadows: How and Why They can Affect Hydraulic Fracturing in Shale Plays



Biography:

Dr. Neal Nagel is currently Chief Engineer for OilField Geomechanics and has nearly 30 years of industry experience. He is a well-known expert in the geomechanics of Unconventionals and has given many invited SPE, AAPG, HGS, SEG, and SPWLA presentations. Nagel has also authored or coauthored more than 50 technical papers, with 20+ related to Unconventionals, including a keynote presentation at the 2014 SPE HFTC. He is a past SPE Distinguished Lecturer, was chief editor of the 2010 SPE Monograph on Solids Injection, has served on the SPE Drilling and Completions Committee, and also been a local SPE section officer.

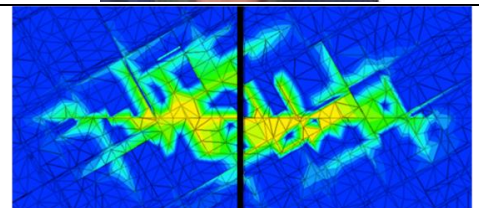


Abstract:

Much is now made about “Stress Shadows” and their impact on hydraulic fracturing - particularly in multi-stage horizontal laterals commonly used in Unconventionals. Unfortunately, there is no standard definition of Stress Shadows and, as a result, there is much confusion over what they are and aren’t, and, most importantly, why they can have a significant impact on hydraulic fracturing operations. The goal of this presentation will be to address this confusion and more fully explain Stress Shadows and their impact.

The creation of hydraulic fracture width during a stimulation generates a change in the stress field, which alters all three principal stresses as well as tip shear stresses. These stress changes are the Stress Shadows.

As hydraulic fracture propagation is often controlled by the stress field, Stress Shadows may change the propagation path for subsequent hydraulic fractures or, as seen in cluster fracturing, propagation may be impeded completely. The presence of natural fractures and weakness planes can also affect, and be affected by, Stress Shadows. At the hydraulic fracture tip, shear stresses are generated that offer the potential to shear and open closed natural fractures and weak planes – and if opened, it may be possible to stimulate them. Equally important, behind the hydraulic fracture tip Stress Shadows increase the magnitude of all three principal stresses, which tends to close weakness planes making them more difficult to stimulate. Because of these effects and others, understanding and designing for the impact of Stress Shadows is often critical for stimulation optimization.



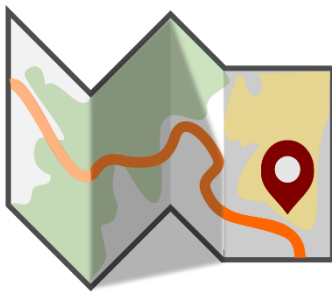


CALENDAR OF EVENTS and NEWS WYOMING PETROLEUM SECTION



Due to our excellent participation in past continuing education events, we will continue to offer these as they become available. Our new web address is <http://wyoming.spe.org>

The SPE Wyoming Petroleum Section will send letters requesting sponsors for the 2017 school year. If you need further information, please contact Sabrina Hamner at sabrina.hamner@wyo.gov



We appreciate your patience as we try to find a new regular meeting location. Meetings will now be held at either the Ramada or at the Lyric

**RAMADA
300 WEST F STREET
CASPER**

**LYRIC
230 WEST YELLOWSTONE
CASPER**

This year SPE provided scholarships for 14 students in the Rocky Mountain Region totaling \$11,625



****Members - Please Phone in Reservations for Meetings ****

Dave Chase is taking phone reservations for meetings at 261-7685. Please take a little extra time and utilize this service so that an accurate headcount can be given to the venue for their meal preparation. This also helps us to get scheduled into a meeting room that is adequately sized for our meetings. Your help in this matter is greatly appreciated.