

# SOCIETY OF PETROLEUM ENGINEERS

Wyoming Petroleum Section  
Mike Bingle-Davis, Secretary  
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Casper, WY 82602-2154



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

## 2016-2017 Wyoming Petroleum Section Officers

Section Chairman	Dave Chase	BLM	261-7685	dchase@blm.gov
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## ***UPCOMING AREA MEETINGS***

**WYOMING GEOLOGICAL ASSOCIATION** - All meetings at Ramada( see announcement in newsletter). Lunch buffet served from 11:15 to 12:00 at a cost of \$13.00. Contact the WGA office 237-0027 for more information or to make reservations.

**October. 7, 2016: Tom Drean – Wyoming Geological Survey – Practicing Geology in Iraq**

**October. 14, 2016 (SPE): Scott Hornafius – Elk Petroleum – CO2 Supply Options for EOR Projects in Wyoming**

**October. 21, 2016: Gretchen Hurley – BLM Cody – The Geology of Natural Trap Cave**

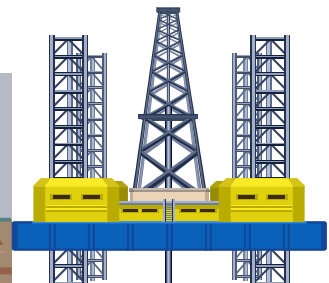
**October. 28, 2016: Shawna Punteney – Friends of Fossil Fuels – Discussion on Friends of Fossil Fuels**

### **UPCOMING MONTHLY PRESENTATIONS FOR THE SPE WYOMING PETROLEUM SECTION:**

**Oct. 14, 2016: Scott Hornafius - Elk Petroleum – CO2 Supply Options for EOR Projects in Wyoming**

**Nov. 18, 2016: Neal Nagel – OilField Geomechanics LLC – Stress Shadows: How and Why They Can Affect Hydraulic Fracturing in Both Conventional and Unconventional Shale Plays**

**Dec. 7, 2016: SPE/WGA Christmas Party**





Society of Petroleum Engineers



# Wyoming Petroleum Section October 2016 Newsletter



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

**When:** Friday, October 14, 2016  
**Where:** Ramada  
**Time:** 11:15 AM (\$13.00 for buffet lunch)

**Please notify** Dave Chase at 261-7685 by noon on Tuesday, October 11, 2016 if you plan to attend. Please utilize this service so that we can give the Ramada an accurate headcount)



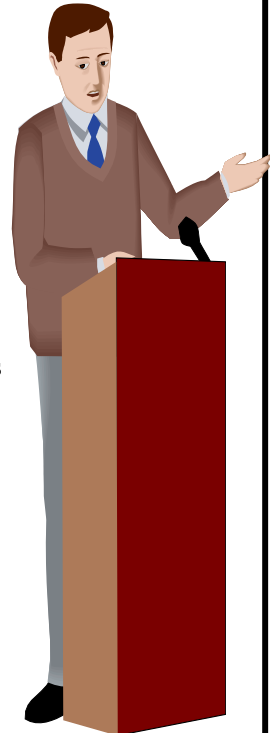
**Event:** Scott Hornafius, Elk Petroleum – CO2 Supply Options for EOR Projects in Wyoming

## Biography:

Scott Hornafius received a Ph.D. in the Earth Sciences from the University of California at Santa Barbara and has worked in the oil industry for the last 32 years in Colorado, Wyoming, California, Texas, London, Papua New Guinea and Australia. For the past three years he has served as the President of Elk Petroleum, which is an Australian listed company with assets in Wyoming and Nebraska. While working for Elk Petroleum he developed the concept of Carbon Negative Oil made by a process called bio-CO<sub>2</sub>-EOR, and this work was recently published in the International Journal of Greenhouse Gas Control. Elk Petroleum is pursuing the development of CO<sub>2</sub>-EOR projects in both Wyoming and Nebraska, with the first project being the Grieve EOR Project to the west of Casper, which is being developed in partnership with Denbury Resources.

## Abstract:

The potential oil reserves from CO<sub>2</sub> Enhance Oil Recovery (CO<sub>2</sub>-EOR) projects in Wyoming are estimated to be 1.2 to 1.8 billion barrels, which would require up to 20 TCF of CO<sub>2</sub> to recover. Wyoming has large CO<sub>2</sub> reserves in the La Barge and Lost Cabin natural gas accumulations that are estimated to be in excess of 10 TCF. Access to these CO<sub>2</sub> supplies for additional EOR projects is limited due to the existing contractual commitments for the current sales volumes (345 MMSCFD). Elk Petroleum signed a contract with ExxonMobil in 2011 for a CO<sub>2</sub> supply from the Shute Creek gas plant for the Grieve CO<sub>2</sub>-EOR project, but contracts for CO<sub>2</sub> supplies for additional EOR projects have proven to be difficult to secure. An alternative source of CO<sub>2</sub> is available from the fermentation emissions from corn ethanol plants in Nebraska and Iowa (>550 MMSCFD) if a pipeline could be constructed from Iowa through Nebraska to Wyoming to deliver this CO<sub>2</sub> to Casper. The Wyoming Pipeline Corridor Initiative is in the planning stages for additional CO<sub>2</sub> pipelines that could deliver CO<sub>2</sub> from near Casper to the Powder River and Big Horn Basins. Since corn ethanol CO<sub>2</sub> fermentation emissions are biogenic in origin, there are financial incentives available from the California carbon market that would enable these pipelines to be constructed with funding from the California Low Carbon Fuel Standard (LCFS). These carbon market financial incentives are large enough that the price of the delivered corn ethanol CO<sub>2</sub> should be lower than the price currently paid by Wyoming oil producers for natural sources of CO<sub>2</sub> produced in Wyoming.





## 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](mailto:sabrina.hamner@wyo.gov)

**The Casper Petroleum Club closed Saturday, October 1<sup>st</sup> after serving as a hub for industry, politics, and business for 67 years. It has provided SPE with a reliable meeting location and its years of accommodation will be missed. As a result, meetings will now be held at the Ramada in Casper, 300 West F Street. Use main entrance, turn right and follow the signs.**

**NAPE Denver October 12-13, 2016  
Colorado Convention Center  
More information: [www.napeexpo.com](http://www.napeexpo.com)**

**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 Ramada 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.*