



MONTANA GEOLOGICAL SOCIETY

NEWSLETTER

MGS Vol. 55 No. 6

November 2011

**MGS Luncheon Meeting
Thurs. Dec. 8th, 2011
11:45 AM
Petroleum Club**

**JEFF ZAWILA
Sr. Geophysicist
SM Energy**

**"I Found Some Cool
Seismic Attributes That
Fit Well Data!!!"**

Members who do not
receive an e-mail reminder
can RSVP by calling Doretta Brush
at Ballard Petroleum 406-259-8790

All meetings are held at the
Billings Petroleum Club at
11:45 a.m. unless otherwise noted

MGS HOME PAGE:
www.montanags.com

MGS EMAIL:
[montanageologicalsociety@
gmail.com](mailto:montanageologicalsociety@gmail.com)

PRESIDENT'S LETTER

Andy Hennes

This year, after great internal struggle, I have come to realize that the leaves in my yard may not be raked and hauled off until the snow melts next spring. In stark contrast to my neighbors' perfectly manicured lawn, my lawn sits in a Montana limbo between the luscious green summer, the colorful fall mess and the dreary grips of a brown and greyish-white winter. Why, you ask, do I not take an afternoon and remedy the mess with a large rake and series of black plastic sacks? TIME!..... This one, simple, dimension seems to become more and more elusive with every waking day (as compared to the other three dimensions which thrust themselves upon me in much the opposite manner). I know that using the "I just don't have the time" excuse is somewhat lame. As my wife says "you make time for what you want to make time for". Perhaps she is correct. Perhaps I don't want to make time to rake leaves on a blustery fall afternoon simply because I don't want to do it. I have heard that the definition of insanity is doing the same thing over and over and expecting different results. I can't help but think of this every time I see someone trying to rake leaves while the wind is blowing: 1.) reach out with rake 2.) rake leaves in 3.) lift rake up 4.) watch leaves blow back 5.)repeat talk about being stuck in a do loop.

So I invite you, my fellow MGS members, to join me in my stance against raking leaves. We too can take back the fall and make time for more important things. Things like: family, charity, walking the dog, soaking at the hot springs and the Montana Geological Society.

The society has many great venues for you to burn your time so you don't find yourself stuck in your back yard this fall raking leaves. For those of you that continue to join us for a somewhat regular Luncheon Meetings, we appreciate your participation, for those that haven't shown up in a while, why not come on down, enjoy a great meal at the Petroleum Club and learn something new about our science. Our next Luncheon on Dec. 8th(details within), presented by Jeff Zawila, a recently transplanted local geophysicist will be a good one (I have seen a preview). We will also be holding our annual "election" so it is especially important that you be there. Please send nominations for any officer position to me ahennes@sm-energy.com before Dec. 7th. (That's right I'm not officially the President yet, but volunteered to do the newsletter so I didn't have to pick up a rake).

continued on page 2.....

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The annual Oilie's Christmas party will take place on Thursday Dec. 15th at the Petroleum Club and is the must attend event of the season. The Past Presidents' Dinner is slated for some time in February, and I have it from an inside source that Andrew Urie may be dropping it all in sunny Houston to make an appearance!

The society is also busy with outreach and we invite any and all members to participate at any level; even bring forth your own ideas! We are currently in search of applicants for our Teacher of the Year Award, working to ratify an annual MGS scholarship program for higher education students at a Montana school, funding intern work on a digital MGS road log project, looking for volunteers to judge and man the booth for the Billings Science expo in March and working to bring another short course to Billings in the spring.

So I invite you to get involved with your society. While our yards may suffer this fall (and into the spring) putting effort into an organization and reaching out to the community will not. As you can see below, I am investing in a couple of power rakes that should be ready for beta testing in another year or two.

Happy Thanksgiving!

Your MGS "President" – Andy Hennes



MGS Luncheon Meeting

Thursday December 8th

11:45 am – Billings Petroleum Club

Please join us for lunch (\$14) and the talk (no charge)

RSVP – montanageologicalsociety@gmail.com, or 406-259-8790

An email reminder will be sent 3 days prior to the talk



JEFF ZAWILA

Sr. Geophysicist
SM Energy Company
Billings, MT

HOSTED BY THE MGS

I Found Some Cool Seismic Attributes That Fit Well Data!!!

A case study for detecting thin Upper Morrow fluvial sands in the Mid-continent from a geostatistical simultaneous inversion.

The consolidated rocks comprising the Upper Morrow fluvial sandstones of the Mid-continent are high risk targets due to a lack of acoustic contrast with respect to their adjacent shales. They are, however, very prolific oil and gas reservoirs. In log data, the Upper Morrow sandstones are easily distinguished from other lithologies in cross-plots of P-Impedance vs. S-Impedance, colored by rock properties such as V-shale, effective porosity, Sw and lithology. These elastic log plots imply an AVO effect in the seismic reflection data. The analysis of the field data using a simultaneous AVO inversion algorithm enabled reservoir sands to be highlighted in cross-plot space, thus enabling geobodies of reservoir sand to be captured in inverted 3D volumes. Seventy-eight percent (78%) of the wells that penetrated the geobodies encountered thick Upper Morrow sandstone whereas only seventeen percent (17%) of the wells drilled outside of the geobodies encountered significant sandstone.

This reservoir characterization technique utilized for conventional plays can easily be applied to unconventional reservoirs. Characterizing unconventional plays pose additional challenges since the delineation of economic “tight” shale versus uneconomic “tight” shale is more subtle. A case study will be examined.

Biography

Jeff has 14 years of petroleum experience as an interpretation geophysicist currently working for SM Energy chasing unconventional reservoirs in the DJ and Powder River Basins. Jeff has also worked for EOG Resources, Phillips Petroleum, and Arco in Oklahoma City, Tulsa, and Anchorage exploring in the Anadarko Basin, Hugoton Embayment, Hardeman Basin, Caspian Sea, and North Slope of Alaska. Jeff specializes in 3D seismic interpretation and reservoir characterization and focuses on how seismic data can improve the bottom line.

**We will also be holding MGS Officer Elections at this Luncheon meeting*



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Members without current email addresses will continue to receive their renewal forms by regular mail.

After Jan. 1, 2012 dues are \$25.

And as always, please encourage any geologists you know to JOIN!



It's that time of year again!

Officer elections will be held Thursday December 8th, 2011 during the MGS Luncheon Meeting at the Petroleum Club. Please come and let your voice be heard.

Nominees are:	President	Andy Hennes
	1 st Vice President	David Fishbaugh
	2 nd Vice President	Jay Gunderson
	Treasurer	Larry Jones
	Secretary	Mark Millard

Please submit additional Nominations to: montanageologicalsociety@gmail.com

YOU ARE INVITED



The Holidays are fast approaching.
MGS hopes your plans include attending this year's

Oilies' Christmas Party

Thursday, Dec. 15th 2011
5 – 10 pm
Billings Petroleum Club

As always, there will be plenty of gratis food, beverages, great views and most importantly lots of friends, old and new, to help celebrate the holidays.

Please contact Rob Diedrich (869-8643) with inquiries and/or donations

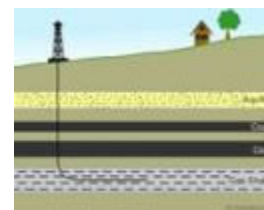
[Links Between Hydraulic Fracturing and Groundwater Contamination?](#)

November 11, 2011 | University of Texas at Austin

Despite what Josh Fox's movie "Gasland" might have you believe.....

Early results from a University of Texas at Austin study of hydraulic fracturing and groundwater contamination suggest that there is no direct link between the fracturing and contamination. Problems of contamination are instead related to other parts of the drilling and well management process such as leaking casings, failed cement jobs and above-ground spills.

Get the full story at http://www.utexas.edu/news/2011/11/09/energy_fracing/



Hydraulic Fracturing

U.S. Forest Service

GEOLOGIST JOB IN MONTANA!

OUTREACH NOTICE

Region One, Lewis and Clark National Forest

Title, GS-Series-Grade:	Geologist GS-1350-05/07/09 Physical Scientist GS-1301-05/07/09
District/Unit:	Judith Ranger District, Stanford Montana or Belt Creek Ranger District, Neihart, Montana Lewis and Clark National Forest
Date of Notice:	November 8, 2011

The Lewis and Clark National Forest will be filling one GS-05/07/09 Minerals Specialist position with a duty station of either the Stanford or Belt Creek Ranger Districts, Montana. This position is a permanent full time position. This notification is being circulated to inform prospective applicants of this upcoming opportunity and to determine interest in the position.

Interested applicants, or those desiring further information, should contact the supervisor listed below:

Name of Supervisor:	Ron B. Wiseman, District Ranger Judith Ranger District Or Bethany Ihle, Geologist Helena and Lewis and Clark National Forest
DUE DATE TO RESPOND:	December 9th, 2011
Phone Number:	Wiseman 406-566-2292; Ihle 406-495-3863
e-mail address:	mailto:rwiseman@fs.fed.us ; bihle@fs.fed.us
Mailing address:	PO Box 484 Stanford, MT 59479

MGS Calendar and Reminders

Dec. 8 **MGS Luncheon – Jeff Zawila, Sr. Geophysicist, SM Energy**
“I Found Some Cool Seismic Attributes That Fit Well Data!!”
 Petroleum Club, Billings, MT

Dec. 15 **MGS/BGS/MAPL/SPE Oilies’ Christmas Party**
 Petroleum Club, Billings, MT

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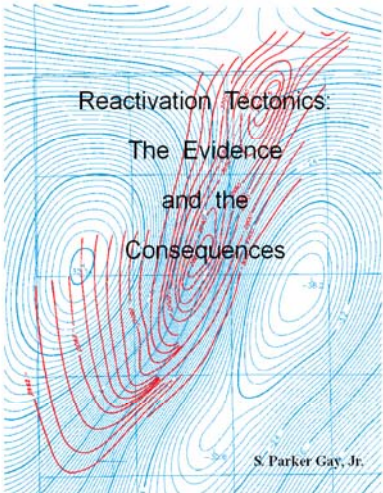
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Submission deadline for the MGS Newsletter is the 20th of each month. Submit requests to Newsletter Editor.
Jay Gunderson
jgunderson@mtech.edu 657-2702

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