

December 2005

MGS Luncheon
Meeting Schedule
for December 2005

*There are no MGS
luncheon meetings
planned for December.*

Tuesday, December 5,

SPE-Billings Chapter,
“High-pressure Air
Injection Project on
Cedar Creek Anticline”,
Speaker: Robert
Sutherland, Encore
Acquisition Co.,
Technical Advisor.
Sheraton Hotel,
11:30 am, \$18.00.

Thursday,

December 15, Joint
MGS, SPE, MAPL,
BGS Christmas Party,
6:00 p.m. at the Billings
Petroleum Club.

Friday, January 27,

MGS Past President’s
Dinner, come roast David
Lopez, Sheraton Hotel,
Skytop Room, time
TBA.

**TO RSVP FOR MEETINGS:
Call Colleen Duffy,
406-252-7921.**

**MGS HOME PAGE:
<http://www.montanags.org>**

MGS EMAIL: mgs@wtp.net

PRESIDENTS LETTER...

After working my way through the MGS officer treadmill, I am somewhat surprised to find myself as the President of the Montana Geological Society. I will try to promote the geological sciences and maintain a strong organization.

The strength of the MGS depends on the participation of the members to promote geology, resource development, and natural resources in general. The MGS membership has a long legacy in these activities. Over the years the MGS has promoted field trips, publications, conferences, and provided a venue for many excellent lectures. More recently the members developed a series of CD’s containing a compilation of some of the best subsurface data available in the state of Montana. Several of our members are currently working on updating the Oil and Gas Fields of Montana volumes and making it available as a CD. All of this work has been conducted by volunteers which to me is an amazing accomplishment. To top off all of this activity, MGS is sponsoring the AAPG-RMS Meeting that is scheduled for June 12-14, 2006 at the Billings Convention Center. Participation does not appear to be a problem with the MGS membership and all members should be proud of their record.

In spite of all the activities and support by the members our ranks have been dwindling over the past several years. As a result fewer members are doing more volunteer work and our annual budget continues to decline. I have projected a small negative balance at the end of my term. The MGS Board is working on several items to hopefully turn the projected negative balance around. These include updating our membership list to better reflect the active “paid” members of MGS and limiting the distribution of the newsletter to the active members, increasing our membership, increasing newsletter advertising, and increasing income from CD and publication sales. Through the efforts of Bob Schalla, the newsletter will be expanded this year with the goal of being more relevant and interesting to our members. Increased individual costs should be balanced by reduced numbers of newsletters shipped and some additional advertising income.

I realize that my background is somewhat different from most of the active members of MGS. I have worked as a geophysical engineer, but for the past 25 years most of my work experience has been in hydrogeology. In reality oil and gas geology and hydrogeology have much in common. The rocks are all the same and it’s just a matter of what kinds of fluids are moving through the rocks. The highlight of my participation in MGS has been the outstanding speakers we continue to get year after year. Every talk has provided at least one piece of knowledge or information that I find interesting and useful to my understanding of geology. In the past year or so we have been presented with a wide range of topics from dinosaurs to Martian geology; from regional to international oil and gas topics; and from surficial geology to the Stillwater mine. This wide range of lecture topics is why I have maintained a strong interest in the MGS for most of the past 20 years. I have had the pleasure to meet a great group of individuals with diverse and yet similar interests in the field of geology.

Please contact myself or other MGS Board members if you have any ideas to promote the field of geology or the MGS. We are working for the members to maintain a strong and vigorous organization. Because we have relatively few active members we may need to call on you for ideas and some of your time.

MEMBER MOVES

MGS member **Tom Hohn** has moved his business to a new address. Hohn Engineering is now located at 2708 1st Avenue North, Suite 200, Billings, MT, 59101, (above Walkers Grill) phone – (406) 655-3381

HUMOR ?, I DUNNO ...

Statement: “Fifty Brazilian soccer players participated in the event”

Question: How many is a brazilian ???

NOTICES

PRICES

November 9, 2005

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\$57.80/bbl

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Submission Deadline for the MGS Newsletters is the **10th** of each month. Submit requests to Bob Schalla, ras@mcn.net, 656-1647 or Lisa Reinschmidt at L.reinschmidt@worldnet.att.net, 406-248-7026.

NEW AND RETURNING MEMBERS

Kurt Mellinger

Kurt is a consulting geologist in Cody, Wyoming. He holds a BS degree in geology from Metro State College. Kurt is a member of WGA and RMAG and is available for consulting work in basins throughout the Rockies.

John Fredlund

John is an Independent Landman and President of Zone Exploration in Billings, Montana. He holds a Bachelor of Journalism degree from the University of Texas. John is a member of MAPL, AAPL, WAPL, and LAND.

“QUOTE OF THE MONTH”

“All good and useful observation must be embedded within a theory. Science gains its strength by structuring observations as continual tests of a theory’s power.

Objectivity does not reside in theory-free perception; such a pipe dream can lead only to some fancy; falsely construed as secure because we have not scrutinized our constraining biases. Objectivity lies in the flexibility to reject a cherished theory when an anticipated observation cannot be affirmed, and a perception of contrary meaning delights us instead.

Theory must guide observation.

If we do not cast our theoretical net widely enough, we will not see what lies before our eyes, for the conceptual tools will be unavailable to us.”

Stephen Jay Gould
(1941-2002)

MONTANA INCREASES ROYALTY RATE FOR OIL AND GAS LEASES ON STATE LANDS

On August 15, 2005, the Montana State Board of Land Commissioners approved an increase in the royalty rate for oil and gas leases on State lands. The new royalty rate of 16.67% on both oil and gas became effective at the State lease auction on September 7. The Montana Petroleum Association offered an amendment at the Land Commissioners meeting asking that any nominations for state lands that do not receive a bid in the lease auction go to the nominator at the lower rate of 1/8th. The MPA amendment was not adopted.

The royalty rate change affects only new leases. The current default royalty rate for existing leases remains unchanged at 12.5% for gas and 13% for oil.

The Board took this action pursuant to its responsibility to ensure that dispositions of interests in school trust lands are at fair market value. The Board also authorized the Department of Natural Resources and Conservation to begin the process of updating the department’s administrative rules to reflect an adjustment of the default royalty rate.

For more information contact Monte Mason, Minerals Management Bureau Chief at (406) 444-3843 or mmason@mt.gov.

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Bureau of Land Management Fee Increases

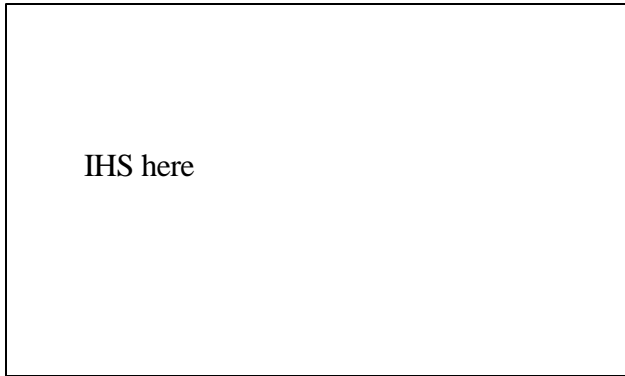
Effective November 7, 2005, fees related to both energy and non-energy mineral applications and operations on public lands were increased. According to the Bureau of Land Management this fee increase will allow recovery of more of the costs associated with document processing.

The increased fees are associated with processing applications related to oil and gas leasing, coal, non-energy leasable minerals, and mineral materials, as well as costs associated with administering mining claims. In the new regulations, fees for these applications are grouped in two categories. A "case-by-case" category will cover BLM actions where costs vary widely with each individual application. A "fixed-fee" category will cover actions that have more predictable costs. In cases where the Bureau cannot establish a reliable fixed fee, the rule requires calculation of a case-specific fee.

Some examples of the new fee schedule for oil and gas activity are given below:

	<u>Existing</u>	<u>New Fee</u>
Non-competitive Lease Application	\$75	\$335
Competitive Lease	\$75	\$130
Assignment and Transfer	\$25	\$75
ORRI Transfer	\$25	\$10
Name change, etc.	\$0	\$175
Lease Consolidation	\$0	\$370
Lease Renewal	\$75	\$335
Lease Reinstatement, Class 1	\$25	\$65
Leasing under ROW	\$75	\$335
Geophysical – Notice of Intent	\$0	\$0
Appl. for Permit to Drill (APD)	\$0	\$0

For more information concerning the new fee schedule contact Teri Bakken (896-5069) or Greg Albright (896-5260) at the Bureau of Land Management.



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**Thursday
December 15
6:00 P.M.**

**MGS
CHRISTMAS
PARTY**

*Come join us for
cocktails and
appetizers at the
Joint Sponsored
MGS, SPE, MAPL,
BGS Christmas
Party, 6:00 p.m. at
the Billings
Petroleum Club.*



**UPPER MISSOURI RIVER BREAKS
NATIONAL MONUMENT
DRAFT RMP AND EIS**

The BLM has released the Draft Resource Management Plan and Environmental Impact Statement for the Upper Missouri River Breaks National Monument. The Draft RMS/EIS considers and analyzes six alternatives that address the future management of approximately 375,000 acres of BLM land in the Monument, with Alternative F identified as the agency's preferred alternative.

The National Monument includes lands in Phillips, Fergus, Blaine and Chouteau counties, in Townships 20 North to 27 North and Ranges 9 East to 24 East.

Review and comments from interested parties are needed at this time to ensure that concerns are adequately addressed in the planning process. The public review period for the Draft RMP/EIS is 90 calendar days and will begin with publication of the Notice of Availability in the Federal Register by the EPA. Written comments should be sent to the Monument Manager, 920 NE Main Street, P.O. Box 1160, Lewistown, Montana 59457.

For additional information or clarification regarding this document or the planning process, contact Jerry Majerus, Project Manager at (406) 538-1924.

**Rocky Mountain Section Meeting a
Great Success**

For those of you who were unable to attend, the recent AAPG-Rocky Mountain Section meeting in Jackson Hole, Wyoming, was a resounding success. Attendance exceeded expectations with a total of 696 registered participants, according to meeting Co-Chairman Jerry Walker. As a result, there were some complaints about crowded meeting rooms. The larger than expected crowd also forced some of the sessions to be held at the Ice Arena, where attendees were literally sitting on ice. But the cold seemed to keep everyone a little more alert. Overall, everything came together quite well. Kudos to Jerry Walker and Sandra Mark for making the meeting such a great success.

The attendance numbers at the Jackson meeting bodes well for next years' meeting which will be held in Billings, June 11-13. Co-Chairmen Dave Ballard and Rob Diedrich are busy putting together a great looking program with the theme "**Undaunted Exploration of the Rockies**". Events will be planned around the bi-centennial of the Lewis and Clark expedition's traverse through the area. So it's not too early to mark your calendar and start making plans to attend. As noted in last month's newsletter the "Call for Abstracts" has been announced with a submittal deadline of January 31, 2006. For more information about submitting an abstract or the technical program in general contact David Lopez at Dlopez@mtech.edu or (406) 657-2632.

MARK YOUR CALENDAR

REMINDERS

- December 6** **State of Montana – Oil and Gas Lease Sale**, Dept. of Transportation Bldg., Helena, Montana, 9:00 am, for more information contact – Julie David (406) 444-4576 or jddavid@mt.gov.
- January 12** **RMAG Short Course** – Structure and Geology of the Overthrust Belt, Denver, Colorado, for more information contact – The Rocky Mountain Association of Geologists (303) 573-8621 or RMAGdenver@aol.com.
- January 31** **BLM – Federal Oil and Gas Lease Sale** (Montana, North Dakota, South Dakota), Billings, Montana, 9:00 am, for more information contact – Tessie (406) 896-5091.
- February 2-3** **NAPE Expo 2006 (North American Prospect Expo)**, George R. Brown Convention Center, Houston, Texas. Register at – www.napeonline.com; for more information contact – nape@landman.org.
- February 6-10** **AAPG Annual Winter Education Conference**, Houston, Texas, for more information see – aapg.org/education.
- March 10** **12th Annual 3D Seismic Symposium**, Denver, Colorado, for more information contact – The Rocky Mountain Association of Geologists (303) 573-8621 or RMAGdenver@aol.com.
- April 9-12** **AAPG Annual Convention**, Houston, Texas, for more information contact the AAPG Convention Dept. (918) 560-2617 or aapg.org/houston.

RMAG-COGA CALL FOR ABSTRACTS

The Rocky Mountain Association of Geologists (RMAG) invites you to submit an abstract for “**Rocky Mountain Natural Gas 2006**”. This conference, to be held at the Colorado Convention Center, Denver, Colorado, August 7-9, will be a joint meeting put on by RMAG and the Colorado Oil and Gas Association (COGA).

Abstracts for oral and poster sessions should be limited to 250 words and submitted to: bluneau@slb.com. Use the heading of **COGA-RMAG 2006** in the subject line. Abstract deadline is February 1, 2006. For more information contact the RMAG at (303) 573-8621.

**- The MGS Corner for Continuing
and/or Remedial Education -**
(Word of the Month Club – use it three times
and it's yours to keep!)

Definitions: igneous petrology

Poikilitic – Said of the texture of an igneous rock in which small grains of one mineral (e.g. plagioclase) are irregularly scattered without common orientation in a typically anhedral larger crystal of another mineral (e.g. pyroxene); also, said of the enclosing crystal, or *oikocryst*. In hand specimen, this texture produces lustrous patches (luster mottling) due to reflection from cleavage planes of the oikocrysts. Originally spelled poecilitic. Cf: ophitic; endoblastic. Nonrecommended syn: “mottled”, “spotted”.

THIS DAY IN HISTORY

December 24

On this date in 1958, Honolulu Oil Corporation, completed the #11-9 Stensvad, which was the discovery well for the Stensvad Oil Field, Rosebud County, Montana. The discovery well was completed in the “Stensvad Sand” of the Pennsylvanian Tyler Formation flowing 448 BOPD on a 24/64” choke. Ultimately a total of 29 oil wells were completed in Stensvad Field. A water-flood was initiated in 1963. The estimated ultimate recovery will be about 11,000,000 barrels. (Not a bad Christmas present for someone.)

MGS EARTH SCIENCE TEACHER OF THE YEAR AWARD

The MGS executive committee has selected Jim Schulz, a science teacher at Helena High School, as this year's Earth Science Teacher of the Year. Jim will receive a \$200 award from the MGS and an additional \$300 award from the AAPG – Rocky Mountain Section. Jim is now also eligible to win the AAPG Educator of the Year Award. Part of Jim's educational philosophy and the reason he was selected by the MGS is summed up below.

“My purpose as an educator is to make earth science real, exciting, and applicable to the lives of my students. To meet this end, I am always open to the “hook” -the cool demo, the weird example, the discrepant event that reaches out and grabs a student's imagination. I revel in the teachable moment that challenges my students and makes them think. I believe that a teacher who keeps his students desk bound with their heads buried in a textbook, while ignoring the natural laboratory right outside the classroom window, is doing them an incredible disservice.

Today's high school students can easily identify over 100 corporate logos, scores of shoe styles, and dozens of automobiles but have hardly a clue where drinking water, natural gas, or even building stone comes from. All they have to do is turn on the faucet, crank up the thermostat, or call Home Depot and the item appears. Without some sort of practical and personal investigation of such resources, where they are found, how they are extracted, processed, used, recycled and disposed, students remain uninformed and unengaged about the finite nature of the planet. Consequently, they have no interest in the social, economic, environmental, and political impact of natural resource development and their role as consumers. This does not bode well for the future of a democratic society. The potential for increased awareness of such issues along with the joyous pursuit of knowledge continues to drive my passion for educating young people.”

Congratulations to Jim, the Montana Geological Society is pleased to know that teachers of his caliber are bringing the excitement of learning about geology and Earth processes to kids in Montana.

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For more information contact –
Bob Schalla, Newsletter Editor at
(406) 656-1647.

Rocky Mountain College Microscope Challenge Update

Back in June of this year Bill Ballard of Ballard Petroleum, Billings, challenged his geologic colleagues to help Rocky Mountain College purchase a petrographic microscope for research and classroom use. Bill kicked off the challenge by pledging \$5,000 toward the \$ 22,000 purchase price. Since that time a total of nearly \$ 15,000 has been received from companies and individuals in the Billings area.

Dr. Tom Kalakay, Assistant Professor of geology at Rocky, indicated that the original plan was to purchase a single, top-end microscope that could be used both for research and teaching. However, he has now decided to use the money to buy three less expensive scopes so that more students will have access to them. The decision was partly based on the rapid increase in geology majors at Rocky. Dr. Kalakay said, “last year we had 2 geology majors, this year it's up to 12 and they're all in one class. At that rate of increase we could have as many as 40 majors in a few years.”

If you have not already done so, and would like to help out with this worthwhile cause, send your tax-deductible check to “Rocky Mountain College” and write “Geology” in the memo line.

2006 AAPG Rocky Mountain Section Meeting Call For Abstracts

ADDITIONAL INFORMATION

For more information please contact one of the following:

General Co-Chairs

Dave Ballard
dballard@ballardpetroleum.com
406-259-8790

Rob Diedrich
rdiedrich@nancepetroleum.com
406-869-8643

Technical Program Co-Chairs

Steve VanDelinder, Brad Thompson,
and David Lopez
For Information Contact:
DLopez@mtech.edu 406-657-2632

Note from the Editor:

The times they are a changin' ...

PLEASE PAY YOUR 2005-2006 MGS DUES NO LATER THAN DECEMBER 31, 2005. AFTER THAT DATE PLEASE ADD A \$5.00 LATE FEE. MEMBERS WHO HAVE NOT PAID BY JANUARY 31, 2006 WILL BE DROPPED FROM THE MGS MAILING LIST.

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(STUDENT MEMBERSHIP) - \$ 7.50/YEAR

(RETURN THIS FORM ONLY IF YOU HAVE CHANGES OR ARE A NEW MEMBER)

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2000 Guidebook: <i>Northern Montana & the Montana/Alberta Thrust Belt(2 vol. set)</i> <i>50th Anniversary Symposium</i>	----- 125.00
1998 <i>8th International Williston Basin Symposium</i>	-----55.00
1998 <i>Core Workshop guide for Williston Basin Symposium</i>	-----30.00
1997 <i>Big Horn Symposium Guidebook</i>	-----50.00
1997 MGS-TRGS Field Conference Guide: <i>The Edge of the Crazyes: Where the Mountains Meet the Plains</i>	-----25.00
1996 AAPG Rocky Mountain Section Meeting <i>Expanded Abstracts Volume</i>	-----25.00
1995 Guidebook: <i>Seventh International Williston Basin Symposium</i>	----- 100.00
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1977 <i>Rocky Mountain Thrust Belt, Geology and Resources</i>	-----80.00
1971 <i>Catalog of Stratigraphic Names</i>	-----10.00
1969 Guidebook: <i>Economic Geology of Montana</i>	----- 8.50
1951 BGS <i>2nd Annual Central Montana Field Conference</i>	-----12.50
1950 BGS <i>1st Annual Field Conference</i>	-----12.50

PHONE ORDERS: Doretta Brush (406) 259-8790

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