

# NEWSLETTER

Serving the Petroleum and Geothermal Community

Nevada Petroleum and Geothermal Society; P. O. Box 11526; Reno, NV 89510  
Visit our NPS Homepage: <http://www.nbmng.unr.edu/nps/>

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## Dinner Meeting: Thursday, Mar 3, 2016

**SPEAKER:** Robert Abbott, PhD  
Distinguished Member, Technical Staff  
Sandia National Laboratories, Albuquerque, NM

**TOPIC:** Geologic Characterization of Yucca Flat, Nevada,  
Using the Seismic Hammer™

**Place:** Ramada Reno Hotel  
1000 East 6<sup>th</sup> Street, Reno, Nevada

**Cocktail Reception 6:30, Skyline Bar, 14th Floor  
Hosted by:**

**HK Exploration, LLC  
Oil & Gas Exploration Services  
1101 Colorado St.  
Boulder City, NV 89006**

**Dinner Served at 7:00 PM**

**NPGS Members \$20; Non-Members \$23; Students \$10**

**PLEASE RSVP WITH THE FOLLOWING LINK:**

<https://docs.google.com/forms/d/1W426jEEAnaREY1h0qsbD57zVrXJFAj3IP1FN6z9aqfM/viewform>

If you must cancel, please notify NPGS as soon as you are able as NPGS will be charged for all no-shows. Thank you for your consideration.

**SEE CALENDAR Page 14 for upcoming meetings**

► **NPGS Monthly Dinner Meeting – Mar 03, 2016**

Geologic Characterization of Yucca Flat, Nevada,  
Using the Seismic Hammer™

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*Robert E. Abbott, Sandia National Laboratories, Albuquerque, NM*

I present analysis of a multi-component, multi-channel, active-source seismic dataset acquired at the Nevada National Security Site (formerly the Nevada Test Site) using a prototype 13,000-kg weight-drop source. The purpose of the test was to determine the suitability of the source, called the Seismic Hammer™, for basin-scale characterization of Yucca Flat, Nevada. The source generates seismic energy by lifting the mass 1.5 meters before dropping it on a 1.8-m diameter plate. This results in over 190,000 Joules of potential energy being released. My results show that this results in ground motions similar to those produced by 20-kg of TNT equivalent explosives.

Two intersecting linear transects, 24-km and 14-km long, were acquired in 2015 with the goal of characterizing seismic propagation characteristics and geologic structure in advance of Phase II of the Source Physics Experiments (SPE). The goal of SPE is to use a series of underground chemical explosions at Yucca Flat to understand the mechanisms of shear wave generation from underground explosions. Shear-wave energy content is one major discriminant between earthquake and explosion sources and forms the basis of algorithms designed to monitor for worldwide nuclear tests.

My analysis shows that the Seismic Hammer™ is a source with unique properties and was well suited to data acquisition at Yucca Flat. Unlike vibrator sources, the Hammer produces significant energy below 2 Hz, allowing for usable data at source-receiver offsets as far as 11 km. Another benefit, in contrast to explosives, is the ability to hit multiple times at the same source point and stack the data, increasing the signal-to-noise-ratio. P-wave velocity structure was constrained to 2.5-km depth, well below the Paleozoic basement underlying the basin. Correlation of velocity structure to the known geology (Yucca Flat has thousands of boreholes due to underground nuclear testing) is excellent. S-Wave velocity structure was also recovered using the Refraction-Microtremor (ReMi) method. The quality of the shear-wave data was inversely proportional to the proximity to old nuclear tests.

Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

► **About the Speaker:**

**Robert Abbott is a Distinguished Member of the Technical Staff at Sandia National Laboratories in Albuquerque, New Mexico. He received a Bachelor of Science in Physics in 1995, and a Ph.D. in Geophysics in 2001 from the University of Nevada, Reno. His dissertation (directed by John Louie) focused, in part, on the basin structure of southern Dixie Valley, Nevada. At Sandia since 2001, Dr. Abbott has primarily worked on issues surrounding explosion source phenomenology, seismic nuclear monitoring, nuclear nonproliferation, and geophysical characterization. Much of his work has taken place at the Nevada National Security Site (NNSS, formerly the Nevada Test Site).**

► **Thank You to our Hosts for the Cocktail Reception, Mar 03, 2016:**

**HK Exploration, LLC**  
**Oil & Gas Exploration Services**  
**1101 Colorado St.**  
**Boulder City, NV 89006**  
**John Hampshire**  
**949.887.3768**

► **Welcome New NPGS Members:**

Giroux, Brian	Hydrogeologist	McGinley & Assoc.	Reno, NV
Rhodes, Greg	Geologist	ORMAT	Reno, NV

► **NPGS Carson Sink Geothermal Field Trip, Saturday April 9, 2016:**

**Save the Date, Saturday, April 9, Brown Bag Field Trip**

**Planned Agenda; Details will follow soon.**

**Meet in Sparks, Van transportation, 7:30 AM**  
**Patua (Fernley), Tour well field**  
**Grimes Point, Archaeology**  
**Fallon, Forge Project**  
**Stillwater, ENEL**

**There will be a small per person charge for the trip, which will accommodate 35-40 people, on a first come first served basis. More information will follow as available. Stay tuned.....**

► **Commemorative Medallion Celebrating 30 Years of Geothermal Production in Nevada:**

**The NPGS has had bronze ingots (medallions) minted to commemorate the 30<sup>th</sup> year of geothermal production in Nevada. The medallions were designed and illustrated by David Evans, 509 Creative, and minted at the Marshall Mint in Virginia City. The medallions are available for sale at the monthly dinner meetings and online on the NBMG website.**

**Price and distribution for the "Celebrating 30 Years of Geothermal Production" ingots**

The Board of Directors unanimously voted to charge the following prices for sale of ingots:

**For NPGS Members: A one-time opportunity to buy from one to five ingots at a price of \$10 each at each monthly Dinner Meeting for the period of time ending at the March Dinner Meeting. Thereafter the price to Members will be \$15 per ingot.**

For non-members the price will be \$20 per ingot, to be sold at the Monthly Dinner Meetings, or online with additional charges of shipping and handling, if applicable.

It was voted to present one ingot to each speaker(s) following their presentation at each monthly Dinner Meeting of the NPGS.

It was voted to raffle one ingot at no cost to Dinner Guests at each Monthly Dinner Meeting. The method of raffle and presentation of winning ingot will be decided by an Officer of the NPGS.

The medallion is now on the NBMG shopping cart: Thank you Charlotte!!

<http://pubs.nbmng.unr.edu/product-p/nps25.htm>

► **UNR College of Science's Discover Science Lecture Series:**

**Paul Alan Cox, Ethnomedicine Expert, March 10**

**Bob Williams, Hubble Space Telescope Project Leader, April 21**

The lectures will be held at 7 p.m. in the Redfield Auditorium in the Davidson Mathematics and Science Center on the University campus.

<http://www.unr.edu/around-campus/facilities/davidson>

Parking is reserved for the event on the top level of the Brian J. Whalen Parking Complex on North Virginia Street. Admission is free. For more information, call 775-784-4591 or visit the College of Science website at <http://www.unr.edu/science>."

► **Scheduled Nevada BLM Lease Sales:**

***Nevada Geothermal Upcoming Lease Sale  
(Tentative)***

Sale Date	Nominations Due	Sale Posting Date	Protest Deadline
October 25, 2016	January 29, 2016	July 27, 2016	August 26, 2016

***Nevada's Competitive Oil & Gas Lease Sale Schedule  
(Tentative)***

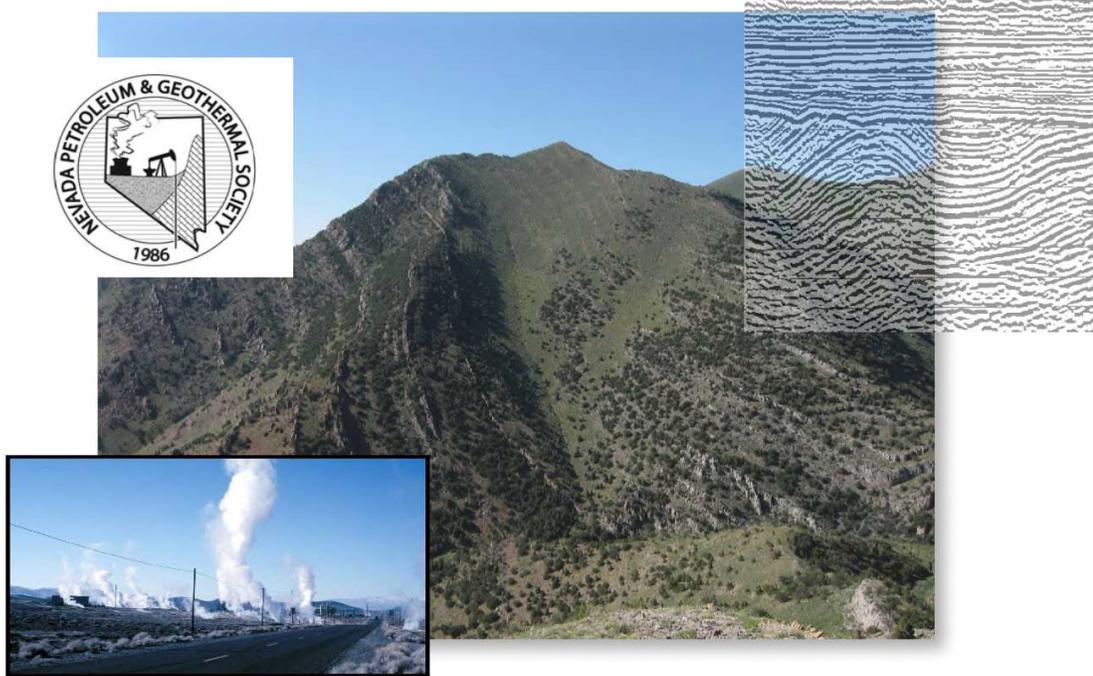
Sale Date	Parcels Offered for District Office at Sale	*EOIs Due	Sale Posting Date	Protest Deadline
March 8, 2016	Elko	June 12, 2015	December 9, 2015	January 8, 2016
June 14, 2016	Battle Mountain	September 18, 2015	March 16, 2016	April 15, 2016
September 13, 2016	Winnemucca/Carson City	December 18, 2015	June 15, 2016	July 15, 2016
December 13, 2016	Ely	March 18, 2016	September 14, 2016	October 14, 2016

\*EOI = Expression of Interest

**Parcel listing for March 2016 Lease Sale:**

[http://www.blm.gov/style/medialib/blm/nv/minerals/oil\\_gas/2016\\_lease\\_sales.Par.87462.File.dat/201603\\_Elko\\_Parcels.pdf](http://www.blm.gov/style/medialib/blm/nv/minerals/oil_gas/2016_lease_sales.Par.87462.File.dat/201603_Elko_Parcels.pdf)

[http://www.blm.gov/nv/st/en/prog/minerals/leasable\\_minerals/oil\\_gas/oil\\_and\\_gas\\_leasing/upcoming\\_sales.html](http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing/upcoming_sales.html)



2016 Application Announcement

**THE NEVADA PETROLEUM & GEOTHERMAL SOCIETY**  
**Graduate Student Research Awards in Geosciences**  
**Two grants up to \$2500 each**

Amounts will depend on proposal quality, and proposal budgets. Awards will be available to support research beginning in the summer of 2015. Applicants must be graduate students in good standing. Successful applicants will be expected to present their results to the Society upon degree completion.

**Guidelines:** Research topics should be:  
• related directly to geology of the Great Basin, and  
• of general interest to those interested in bedrock geology problems.

Students working on lithostratigraphy, biostratigraphy, structure, geothermal systems, geophysical exploration, geochemistry of sedimentary rocks, and tectonic history are especially encouraged to apply.

**To apply:** Email (as PDF file) a 2-page (maximum) research proposal (include results to date, bibliography, and budget), a short (one page) vita that includes academic progress so far, and a letter of recommendation from your academic advisor (may be emailed direct from advisor) to:

Dr. James Trexler, NPGS Scholarship Chairman  
Department of Geological Sciences and  
Engineering, MS 172  
University of Nevada, Reno  
Reno, NV 89557  
[trexler@unr.edu](mailto:trexler@unr.edu)

**Application materials must be  
received by March 1, 2016**

More information? Contact: [trexler@unr.edu](mailto:trexler@unr.edu)

## The Graduate Program of Hydrologic Sciences

### Spring 2016 Colloquium Schedule

Seminars will be 4:00 to 5:00 p.m. in the Redfield Auditorium in Davidson Math and Science Center (DMS 110) unless otherwise noted\*. An informal social will follow each seminar in the Redfield foyer outside the auditorium.

#### Friday, January 29, 2016, DMS 110

##### **Dr. Thomas Painter – NASA's Jet Propulsion Laboratory**

The NASA Airborne Snow Observatory: Foundation for Mountain Snowmelt and Water Cycle Science and Operations

*Joint colloquium with Atmospheric Sciences Graduate Program*

#### Friday, February 19, 2016, DMS 110

##### **Dr. Michael Dettinger – U.S. Geological Survey and University of Nevada, Reno**

Atmospheric Rivers, Storm and Drought in the Sierra Nevada

*Joint colloquium with Department of Geological Sciences and Engineering*

#### Friday, March 4, 2016, DMS 110

##### **Dr. Mark Engle – U.S. Geological Survey and University of Texas at El Paso**

Geochemistry and Origin of Produced Waters from Shale Gas and Tight Oil Reservoirs  
*Joint colloquium with Graduate Program of Environmental Science and Department of Geological Sciences and Engineering*

#### Tuesday, April 5, 2016, UNR/NWRA Spring Dinner Forum at the Best Western Airport Plaza 5:15 PM-8:00 PM\*

##### **Dr. Ty Ferré – University of Arizona**

Seeing Things Differently: Rethinking the Relationship between Data and Models

*2016 Distinguished Darcy Lecturer*

*Sponsored by the National Ground Water Association*

Register at: <http://www.nvwra.org/2016unr-nwradinnerforum>

#### Friday, April 15, 2016, DMS 110

##### **Dr. Kenneth Tate – University of California at Davis**

Producing Livestock and Clean Water on Grazed Landscapes

#### Friday, April 29, 2016, DMS 110

##### **Dr. Dan Giammar – Washington University in St. Louis**

Geochemical Reaction and Transport Processes Involved in Geologic Carbon Sequestration

*Joint colloquium with Department of Civil and Environmental Engineering*



# AAPG Pacific + Rocky Mountain Joint Meeting

2-5 October 2016 | Paris Hotel | Las Vegas

## CALL FOR PAPERS

- ✓ RMAG's *Hot Plays of the Rockies*
- ✓ New Insights in Pacific Exploration
- ✓ Frontier Exploration in the Rockies
- ✓ Redevelopment of Old Fields: Finding the Green in Brownfields
- ✓ Unconventionals: West of the Mississippi River
- ✓ Sedimentology and Stratigraphy: Lacustrine to Deep-Water Reservoirs
- ✓ Geophysics and Petrophysics: From Basins to Pores
- ✓ Structure and Tectonics: New Perspectives and Challenges
- ✓ Energy and the Environment: Regulations and Water Issues
- ✓ Geothermal, Hydrothermal and Uranium Resources

### Submission Deadline 1 June 2016

Abstract Limit 250 words | Find more submission instructions at Section websites

For additional information contact:

#### Jon Allen

PS Technical Program Co-Chair  
(661) 654-7516  
jonathan.allen@chevron.com  
www.psaapg.org

#### Steve Veal

RMS Technical Program Co-Chair  
(303) 945-2630  
sveal@palomarnr.com  
www.aapgrms.org

**NEW PLAYS,  
NEW WAYS,  
NEW DAYS**



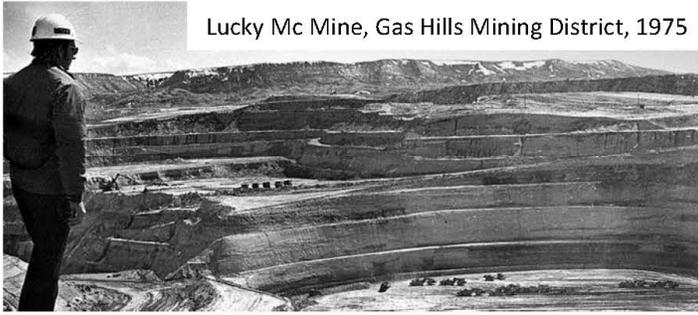


## WYOMING GEOLOGICAL ASSOCIATION

PO Box 545, Casper, WY 82602 602 S David  
[www.wyogeo.org](http://www.wyogeo.org) [info@wyogeo.org](mailto:info@wyogeo.org) 307-237-0027

### 2016 Field Conference: Archean-Tertiary Geology and Mineralization in Central Wyoming August 5-7

This year's WGA field conference will travel from Casper to Lander focusing on structural geology, sedimentation, and mineralization in the Granite Mountains and southeastern Wind River Mountains.



Lucky Mc Mine, Gas Hills Mining District, 1975

The Granite Mountains are unique among the ranges in Wyoming, because they have undergone significant Miocene-Recent extension and represent the heart of a down-dropped basement-cored uplift. Prior to extension in the Eocene, large river system with headwaters in

the Granite Mountains transported uranium to deposits in the surrounding basins. Also in the Eocene, alkaline magmatism intruded the northern margin of the Granite Mountains creating recently identified gold mineralization in the Rattlesnake Hills. The southeastern Wind River Mountains contain a deformed Archean greenstone belt which hosts a significant past-producing iron mine and the principal gold producing mining district in Wyoming.

The conference will begin with a Keynote address Friday evening in Casper. The two day fieldtrip will depart from Casper Saturday and overnight in Lander. Field stops during the conference will include an overview of gold mineralization at the Rattlesnake Hills, uranium



South Pass City, 1870

mineralization in the Gas Hills, uranium mineralization at Crooks gap, magmatism and mineralization in the South Pass-Atlantic City greenstone belt, the Atlantic City iron mine, the Carissa gold mine and mill. Time will also be spent learning about the history of South Pass City, which today is one of the best preserved mining towns in the west.

► **News from Nevada Bureau of Mines & Geology:**

*From: Charlotte Stock*

*The following information is taken directly from emails provided by Charlotte Stock, Nevada Bureau of Mines & Geology*

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You can place an order for other publications or check for shipping charges through our shopping cart at <http://pubs.nbgm.unr.edu>

## **Geothermal Resource Potential Assessment, White Pine County**

Title: **Geothermal Resource Potential Assessment, White Pine County, Nevada**

Author: **Nicholas H. Hinz, Mark F. Coolbaugh, and James E. Faulds**

Year: 2015

Series: NBMG Report 55

Format: 21 pages, color

**Free download or purchase here:**

<http://pubs.nbgm.unr.edu/Geothermal-assess-White-Pine-Co-p/r055.htm>

Geothermal resources can potentially contribute toward the renewable energy portfolio of White Pine County (WPC) in two ways: first through the direct conversion of heat energy into electricity, and the second by way of direct-use applications in which thermal energy is used as a source of heat for buildings, greenhouses, and related structures. Several known geothermal areas within WPC lie proximal to the Southwest Intertie power line currently under construction.

A potential source of electricity could come from conventional geothermal systems associated with young faults and regions of active crustal deformation. These systems have a total installed capacity in the Great Basin region of nearly 1,000 MWe. White Pine County hosts several geothermal systems of this type, but none are currently producing electricity. White Pine County has relatively low rates of crustal deformation relative to western Nevada or the Wasatch region of Utah (e.g., faulting accommodating crustal extension). However, based on a review of the geology in the region, we conclude that sustained and reasonable exploration efforts could result in the discovery and development of one or more electricity-grade geothermal systems, with potential generation capacity at each system in the range of 1–20 MWe.

In addition, a new and unproven type of potential geothermal resource termed "deep stratigraphic reservoirs" or "hot sedimentary aquifers" has recently been proposed in the western United States. White Pine County, and in particular, the northern Steptoe Valley, has some of the most promising potential for electricity generation from this type of reservoir in the United States. Preliminary calculations suggest that as much as 500 MWe of baseload electricity in the northern Steptoe Valley could be produced from this type of reservoir using wells reaching depths of 2 to 4 km. The economic feasibility remains unproven, but initial estimates are encouraging.

Based on observed surface temperatures and flow rates of springs, several geothermal systems in WPC also have the potential for direct use, including the heating of buildings and greenhouses. Such uses could reduce the consumption of electricity generated from fossil fuels and could lead to economic expansion by extending the growing season for certain agricultural products and reducing utility costs.

Funding for this work was provided by a grant from the Department of Energy.

## ***Nevada Geology Calendar 2017 Photo Contest—deadline May 31, 2016***

**WANTED: Photos for the 2017 calendar showing Nevada geology at its best!**

Here are the details for the 2017 calendar contest:

[http://www.nbmng.unr.edu/docs/2017\\_Calendar\\_photo\\_contest.pdf](http://www.nbmng.unr.edu/docs/2017_Calendar_photo_contest.pdf)

- **Deadline for entries is May 31, 2016.**
- Photos need to be taken in Nevada. A location description and/or GPS coordinates should accompany submissions along with description.
- High-quality, high-resolution photo files of at least 300 dpi are required for quality printing.
- You may enter as many photos as you wish.
- Email submissions to Jack Hursh ([jhursh@unr.edu](mailto:jhursh@unr.edu)).
- NBMG Cartographers will make the final decision on the winning photos.
- Prizes will be awarded for first-, second-, and third-place winners.

## **DGSE Lectures—Mar 4**

A message from Dr. Scott McCoy (phone: 775-682-7205), Department of Geological Sciences and Engineering (DGSE) about upcoming lectures:

**Friday March 4**, [GPHS](#) (Graduate Program of Hydrologic Sciences) and [DGSE](#) are cosponsoring a colloquium by **Dr. Mark Engle**, a graduate of the GPHS program who now works for the USGS in Texas. He will talk about “**Geochemistry and origin of produced waters from shale gas and tight oil reservoirs**” in [DMS 110](#) at 4 pm.

## **Fault and Seismicity Maps for Northern Nevada**

Six new preliminary 1:250,000-scale maps that show Quaternary faults and seismicity in northern Nevada are now available. The faults presented are slightly modified from those on [Quaternary Faults in Nevada](#) (NBMG Map 167) and the USGS [Quaternary Fault and Fold Database of the United States](#)[\[earthquake.usgs.gov\]](http://earthquake.usgs.gov) and show fault activity by geologic age. The earthquake data set is compiled from a modified earthquake catalog by Slemmons and others (1965) which includes data beginning in the 1840s, earthquakes recorded by the Nevada Seismological Laboratory from 1970 through 2014, and earthquakes recorded by seismic networks in California and Utah. The shaded-relief basemap was created from a 10-meter digital elevation model and is illuminated from the northwest. These preliminary products are an effort to create more informative earthquake hazard maps for decision makers and the public.

**Authors:** [Craig M. dePolo](#) and [Seth M. Dee](#)

**Year:** 2015

**Series:** Open-File Reports 2015-11A–F

**Format:** 38 x 33 inches

**Scale:** 1:250,000

**Here is the list of all six maps in this series:**

### **[OF2015-11A](#)**

Preliminary Quaternary fault and seismicity map of the **Vya** 1 x 2 degree quadrangle, Nevada

### **[OF2015-11B](#)**

Preliminary Quaternary fault and seismicity map of the **McDermitt** 1 x 2 degree quadrangle, Nevada

[OF2015-11C](#)

Preliminary Quaternary fault and seismicity map of the **Wells** 1 x 2 degree quadrangle, Nevada

[OF2015-11D](#)

Preliminary Quaternary fault and seismicity map of the **Lovelock** 1 x 2 degree quadrangle, Nevada

[OF2015-11E](#)

Preliminary Quaternary fault and seismicity map of the **Winnemucca** 1 x 2 degree quadrangle, Nevada

[OF2015-11F](#)

Preliminary Quaternary fault and seismicity map of the **Elko** 1 x 2 degree quadrangle, Nevada

Click [here\[nbgm.maps.arcgis.com\]](http://nbgm.maps.arcgis.com) for an **index map** of the six 250K quadrangles.

## **Historical Reno Earthquakes (M 6.0 and M 6.4) February 18 and April 24, 1914**

“A pair of earthquakes strongly shook Reno in 1914 and caused light damage to the city. The first earthquake was about magnitude 6 and occurred on February 18th at 10:17 a.m. PST. Shaking in Reno, Sparks, and Virginia City was so strong that people rushed to the streets fearing buildings were going to collapse (dePolo and Garside, 2006). The earthquake lasted for about 10 seconds and broke windows, cracked walls, and sent some parts of a brick firewall crashing to the ground in Reno (*Reno Evening Gazette*, 2/18/1914). The shaking cracked plaster and tossed contents on floors. The earthquake also cracked windows and caused bricks to fall as far away as Virginia City (*Daily Territorial Enterprise*, 2/19/1914).

A second, larger (~M 6.4) earthquake struck Reno on April 24th at 12:34 a.m. PST. This earthquake was stronger than the February event in nearly every aspect, and again people ran out of buildings in Reno. People were awakened from their sleep as far away as the Sacramento Valley in California from the shaking. In Reno, bricks fell from buildings, plaster was cracked, windows were cracked, and dishes were broken (REG 4/24/1914). Four chimneys were damaged up on University Hill (*Reno Evening Gazette*, 4/24/1914). In Virginia City, people who were awake dashed to the streets, as pictures were jarred from walls and dishes fell from shelves (*Daily Territorial Enterprise*, 4/24/1914).”

Excerpt from *Damaging Earthquakes in Nevada: 1840s to 2008*, by Craig M. dePolo:

<http://pubs.nbgm.unr.edu/Damaging-earthquakes-in-NV-p/sp037.htm>

## **2008 Wells Earthquake (M 6.0) February 21, 2008**

Wells earthquake publication edited by Craig M. dePolo and Daphne D. LaPointe:

*The 21 February 2008 Mw 6.0 Wells, Nevada Earthquake: A Compendium of Earthquake-Related Investigations Prepared by the University of Nevada, Reno.*

<http://pubs.nbgm.unr.edu/The-2008-Wells-earthquake-p/sp036.htm>

### ***What's Shaking:***

### **Newsletter of the Nevada Seismological Laboratory**

**You can read the February 2016 issue here:**

[http://www.seismo.unr.edu/Files/newsletter/Newsletter\\_Feb2016.pdf](http://www.seismo.unr.edu/Files/newsletter/Newsletter_Feb2016.pdf)

## Job Announcements from BLM

We are pleased to announce new, exciting positions available at BLM - BUREAU OF LAND MANAGEMENT. It is our hope that qualified, career oriented individuals at your organization or other professionals known to you will actively consider this position and apply accordingly. Efforts on your part to disseminate this information are greatly appreciated.

### Position Information:

Job Description: **Mining Engineer;**

Announcement Number: NM-DEU-2016-0028;

Location(s) of position: Santa Fe, NM, US;

Salary: \$40,033 - \$63,654;

Applications will be accepted until: **04/11/2016.**

For additional information on this job posting, please go to:

[https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114376\[jobs.mgsapps.monster.com\]](https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114376[jobs.mgsapps.monster.com])

### Position Information:

Job Description: **Engineering Technician (Petroleum);**

Announcement Number: MT-DEU-2016-0039;

Location(s) of position: Dickinson, ND, US;

Salary: \$38,154 - \$68,039;

Applications will be accepted until: **03/10/2016.**

For additional information on this job posting, please go to:

[https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114438\[jobs.mgsapps.monster.com\]](https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114438[jobs.mgsapps.monster.com])

### Position Information:

Job Description: **Park Ranger;**

Announcement Number: OR Merit-2016-0167;

Location(s) of position: Ellensburg, WA, US;

Salary: \$40,033 - \$52,043;

Applications will be accepted until: **03/04/2016.**

For additional information on this job posting, please go to:

[https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114466\[jobs.mgsapps.monster.com\]](https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114466[jobs.mgsapps.monster.com])

### Position Information:

Job Description: **Financial Technician;**

Announcement Number: OR Merit-2016-0156;

Location(s) of position: Lakeview, OR, US;

Salary: \$40,033 - \$52,043;

Applications will be accepted until: **03/07/2016.**

For additional information on this job posting, please go to:

[https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114430\[jobs.mgsapps.monster.com\]](https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114430[jobs.mgsapps.monster.com])

### Position Information:

Job Description: **Realty Specialist;**

Announcement Number: OR-DEU-2016-0076;

Location(s) of position: Prineville, OR, US;

Salary: \$59,246 - \$77,019;

Applications will be accepted until: **03/09/2016.**

For additional information on this job posting, please go to:

[https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114451\[jobs.mgsapps.monster.com\]](https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114451[jobs.mgsapps.monster.com])

**Position Information:**

Job Description: **Safety and Occupational Health Specialist;**

Announcement Number: OR Merit-2016-0158;

Location(s) of position: Coeur d'Alene, ID, US, Spokane Valley, WA, US;

Salary: \$59,246 - \$77,019;

Applications will be accepted until: **03/08/2016.**

For additional information on this job posting, please go to:

[https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114434\[jobs.mgsapps.monster.com\]](https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114434[jobs.mgsapps.monster.com])

**Position Information:**

Job Description: **Realty Specialist;**

Announcement Number: NV-DEU-2016-0058;

Location(s) of position: Las Vegas, NV, US;

Salary: \$49,054 - \$77,154;

Applications will be accepted until: **03/04/2016.**

For additional information on this job posting, please go

to: [https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114341\[jobs.mgsapps.monster.com\]](https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114341[jobs.mgsapps.monster.com])

For questions, or more information:

Charlotte Stock, Publication Sales  
Nevada Bureau of Mines and Geology  
Great Basin Science Sample and Records Library  
2175 Raggio Parkway, Reno, NV 89512  
phone (775) 682-8766, fax (775) 784-6690, [www.nbmgs.unr.edu](http://www.nbmgs.unr.edu)

<b>Nevada Petroleum and Geothermal Society Calendar: Year 2015-2016</b>	
Mar 3, 2016	<p><b>NPGS Monthly Dinner Meeting – Thursday Mar 3, 6:30 PM</b></p> <p>SPEAKER: Dr. Robert Abbott, Sandia National Laboratories, Albuquerque, New Mexico            TOPIC: <i>Geologic Characterization of Yucca Flat, Nevada, Using the Seismic Hammer™</i></p>
Mar 4, 2016	<p><b>Graduate Program of Hydrologic Sciences Spring 2016 Colloquium</b>            4-5 PM Redfield Auditorium, Davidson Math &amp; Science Center (DMS 110)            Dr. Mark Engle, USGS University of Texas @ El Paso  <i>Geochemistry and Origin of Produced Waters from Shale Gas and Tight Oil Reservoirs.</i></p>
Mar 8, 2016	<p><b>Nevada BLM Oil &amp; Gas Lease Sale, Reno NV</b>            Elko NV District, posting date: Dec 09, 2015  <a href="http://www.blm.gov/style/medialib/blm/nv/minerals/oil_gas/2016_lease_sales.Par.87462.File.dat/201603_Elko_Parcels.pdf">http://www.blm.gov/style/medialib/blm/nv/minerals/oil_gas/2016_lease_sales.Par.87462.File.dat/201603_Elko_Parcels.pdf</a>   <a href="http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html">http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html</a></p>
Mar 10, 2016	<p><b>UNR College of Science Discover Science Lecture Series</b>  <b>Paul Alan Cox, Ethnomedicine Expert</b>            The lectures will be held at 7 p.m. in the Redfield Auditorium in the Davidson Mathematics and Science Center on the University campus.</p>
Apr 5, 2016	<p><b>Graduate Program of Hydrologic Sciences Spring 2016 Colloquium</b>            UNR/NWRA Spring Dinner Forum            Best Western Airport Plaza, 5:15-8:00 PM            Dr. Ty Ferré, University of Arizona, 2016 Distinguished Darcy Lecturer  <i>Seeing Things Differently: Rethinking the Relationship between Data and Models</i>            register @ <a href="http://www.nwra.org/2016unr-nwradinnerforum">http://www.nwra.org/2016unr-nwradinnerforum</a></p>
Apr 7, 2016	<p><b>NPGS Monthly Dinner Meeting – Thursday Apr 7, 6:30 PM</b></p> <p>SPEAKER: Dr. Greg Pohl, Research Professor, Desert Research Institute            TOPIC: Interim Final Report, Hydraulic Fracturing in The Upper Humboldt River Basin, Aquifer Quality Assessment Program            Publication No. 41263</p>
Apr 9, 2016	<p><b>NPGS Carson Sink Geothermal Field Trip</b>  <b>Saturday, April 9, Brown bag lunch, Details TBA</b>  <b>Patua, Grimes Point, Stillwater</b></p>
Apr 21, 2016	<p><b>UNR College of Science Discover Science Lecture Series</b>  <b>Bob Williams, Hubble Space Telescope Project Leader, April 21</b></p> <p>The lectures will be held at 7 p.m. in the Redfield Auditorium in the Davidson Mathematics and Science Center on the University campus.</p>

May 5, 2016	<p><b>NPGS Monthly Dinner Meeting – Thursday May 5, 6:30 PM</b></p> <p>SPEAKER: Dr. Catherine Hickson, Research Scientist (volcanology)          President at Tuya Terra Geo Corp., Vancouver, Canada          Author, <u>Mt. St. Helens: Surviving The Stone Wind</u>          TOPIC: Mt. St Helens Eruption From an Extremely Close Point of VIEW</p>
Jun 14, 2016	<p><b>Nevada BLM Oil &amp; Gas Lease Sale, Reno NV, Jun 14, 2016</b>          Battle Mtn NV District, posting date: March 6, 2016  <a href="http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html">http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html</a></p>
Jun 19-22, 2016	<p><b>AAPG Annual Convention &amp; Exhibition, 2016: Redefining Reservoir</b>          BMO Centre @ Stampede Park, Calgary AB  <a href="http://ace.aapg.org/2016">http://ace.aapg.org/2016</a></p>
Aug 5-7, 2016	<p><b>Wyoming Geological Association 2016 Field Conference</b>  <b>Archean-Tertiary Geology and Mineralization in Central Wyoming</b>  <a href="http://www.wyogeo.org">www.wyogeo.org</a>; 307.237.0027</p>
Sep 1, 2016	<p><b>NPGS Monthly Dinner Meeting – Thursday Sep 1, 6:30 PM</b></p> <p>SPEAKER: Rod Prosceno, Grant Canyon Oil &amp; Gas, LLC          TOPIC: Nevada – EOR projects – Grant Canyon and Blackburn Fields</p>
Sep 13, 2016	<p><b>Nevada BLM Oil &amp; Gas Lease Sale, Reno NV, Sep 13, 2016</b>          Winnemucca/Carson City District, posting date: June 16, 2016  <a href="http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html">http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html</a></p>
<b>Oct 2-5, 2016</b>	<p><b>Rocky Mountain Section/Pacific Section Meeting – AAPG 2016</b>          2016 joint RMS-AAPG/PS-AAPG annual meeting          Paris Hotel, Las Vegas, Nevada.          Host societies: Idaho Association of Professional Geologists and the Nevada Petroleum &amp; Geothermal Society.</p>
Oct 25, 2016	<p><b>Nevada BLM Geothermal Lease Sale, Reno NV, Oct 25, 2016</b>  <b>Sale posting date: July 27, 2016</b></p>
Dec 13, 2016	<p><b>Nevada BLM Oil &amp; Gas Lease Sale, Reno NV, Dec 13, 2016</b>          Ely District, posting date: Sep 14, 2016  <a href="http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html">http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html</a></p>

The NPGS Newsletter is provided to members of the Nevada Petroleum and Geothermal Society. For information about membership and events, see the NPGS website at <http://www.nbmng.unr.edu/nps/> To submit articles, corrections or suggestions for the newsletter; Contact Vicki Ehni 775-883-1107, cell 775-720-6387; email [vehni@aol.com](mailto:vehni@aol.com) .