

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, Apr 7, 2016

SPEAKER: Greg Pohll, Ph.D.
Research Professor, Desert Research Institute
Reno, NV

TOPIC: Hydraulic Fracturing in the Upper Humboldt
River Basin - Aquifer Quality Assessment
Program

Place: Ramada Reno Hotel
1000 East 6th Street, Reno, Nevada

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



Enviroscientists, Inc.

Environment Resources Management

Striking the Balance

www.enviroincus.com

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/1kDW1WIBOgA_Ey2e1718xFEYdvdC_Mva32kiy3syveiGU/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.

► **NPGS Monthly Dinner Meeting – Apr 07, 2016**

Hydraulic Fracturing in the Upper Humboldt River Basin –

Aquifer Quality Assessment Program

Greg Pohll, Ph.D. – Research Professor, Desert Research Institute

Abstract

Noble Energy recently began oil exploration activities in northeastern Nevada to determine the potential for unconventional oil plays. The oil play is in a low permeable shale and will require hydraulic fracturing. The Nevada Legislature passed a bill in 2013 requiring adoption of new regulations guiding hydraulic fracturing and also paved the way for a study to determine the migration potential to shallow groundwater resources. The Desert Research Institute (DRI) just completed the Aquifer Quality Assessment Program (AQUA) study which collected baseline and post-fracking groundwater quality data and developed numerical modeling tools to assess the migration potential of hydraulic fracturing fluids to the shallow aquifer. This presentation will discuss results from the AQUA study which indicate that water quality has not been degraded following hydraulic fracturing. The numerical modeling suggests that hydraulic fracturing fluids are not likely to migrate to the shallow aquifer at concentrations greater than detection within the next 1,000 years.

► **About the Speaker:**

Dr. Pohll is a research professor of hydrogeology at the Desert Research Institute in Reno, NV. He is an expert in the field of hydrogeology with over 20 years' experience solving real-world problems within complex hydrologic systems that require tools from the fields of surface water hydrology, groundwater hydrology, and statistics. Dr. Pohll's primary research focus is related to the development of three-dimensional groundwater flow and transport models for local and basin-scale assessment of water resources and groundwater contamination issues. In addition to his research responsibilities he also teaches and advises graduate students within the Graduate Program of Hydrologic Sciences at the University of Nevada, Reno.



► **Thank You to our Host for the Cocktail Reception, Apr 07, 2016:**



1650 Meadow Wood Lane
Reno, NV 89502
775-826-8822
www.enviroincus.com

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

Saturday, April 9, Brown Bag Field Trip

Reserve your spot now. Trip is almost full!

Contact John Snow jsnow1@sbcglobal.net 775.336.867

See flyer in this newsletter for planned agenda

There is no charge for this field trip. We will use personal vehicles. Boxed lunches will be provided. Registration on a first come first served basis.

► ***NPGS Officer Elections 2016-2017 (Jun 1-May31) April Dinner Meeting:***

According to the NPGS Bylaws (ARTICLE II - Officers, SECTION 6. Election of Officers), "... in the event that only one candidate for Vice President/President-Elect, one candidate for Secretary, and one candidate for Treasurer are present on the ballot, then these candidates can be elected by a majority vote of the members eligible to vote at the regularly scheduled meeting ..."

As there is only one candidate for each of these three offices for the 2016-2017 term, a vote will be held at the regularly scheduled April dinner meeting for the election of these officers.

The candidates are:

Vice President/President-Elect	Jake Zachery, PE Sr Project Engineer, Krummrich Eng. Corp., Reno, NV
Secretary	Travis Godon, Co-Owner Gracian N. Ulvalde, LLC, Ely, NV and Student, UNR, Reno, NV
Treasurer	Thomas Gallagher, Hydrologic Engineer, NV Water Solutions, LLC

John Menghini will automatically succeed to the office of President following his election as Vice President/President-Elect in 2015. **John Snow**, as immediate Past President, will join the officers on the 2016-2017 Board of Directors.

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

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
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

Results for March 2016 Lease Sale: NO PARCELS SOLD

http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing/upcoming_sales.html

► **Top Ten Oil Producing Countries, 2008-2015:**

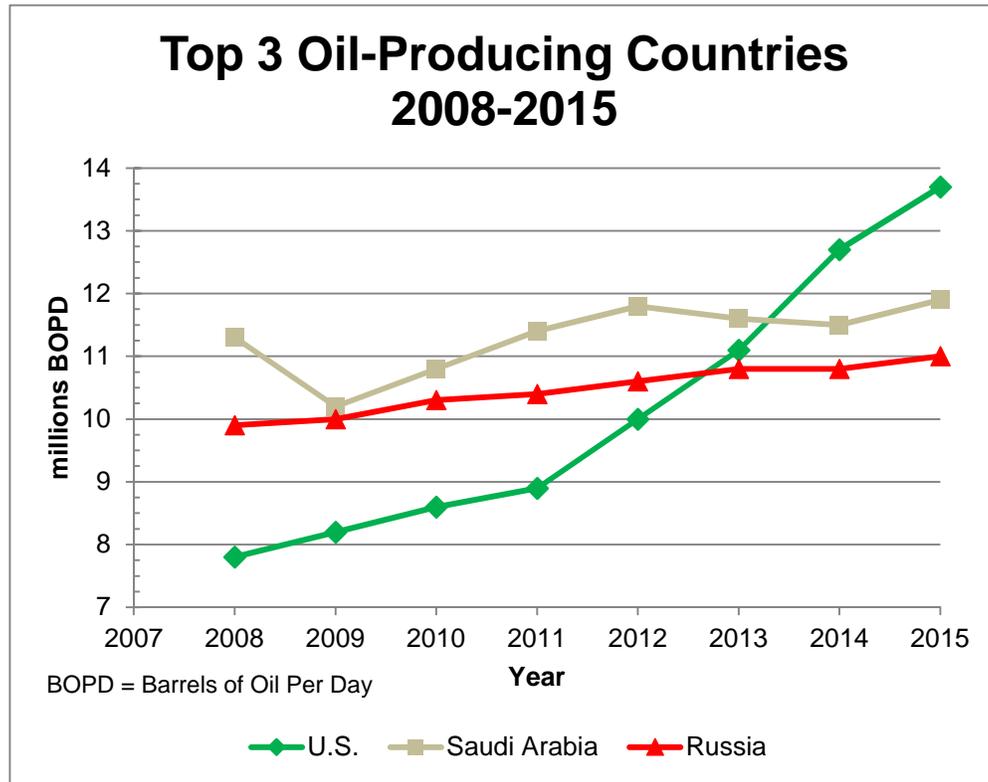
Submitted by Jerry Walker

Millions of barrels of oil per day

Country	2015	2014	2013	2012	2011	2010	2009	2008
U.S.	13.7	12.7	11.1	10.0	8.9	8.6	8.2	7.8
Saudi Arabia	11.9	11.5	11.6	11.8	11.4	10.8	10.2	11.3
Russia	11.0	10.8	10.8	10.6	10.4	10.3	10.0	9.9
China	4.6	4.5	4.5	4.4	4.3	4.3	4.0	4.0
Canada	4.4	4.3	4.0	3.8	3.6	3.4	3.3	3.3
Iraq	4.0	3.4	3.1	3.0	---	---	---	---
UAE	3.5	3.5	3.4	3.4	3.2	2.8	2.8	3.0
Iran	3.4	3.4	3.2	3.5	4.2	4.2	4.2	4.2
Mexico	2.7	2.8	2.9	2.9	3.0	3.0	3.0	3.2
Kuwait	2.7	2.8	2.8	2.8	2.7	---	2.5	2.7
Venezuela	---	---	---	---	2.7	2.6	2.7	2.7
Nigeria	---	---	---	---	---	2.5	---	---

Source: US Energy Information Administration; data includes crude oil, lease condensate, natural gas plant liquids, and refinery processing gain; updated Feb. 11, 2016

<http://money.cnn.com/interactive/news/economy/worlds-biggest-oil-producers/>



► **Summary of 2015 Nevada Oil Production and Drilling Activity:**

**Data from Nevada Division of Minerals "Nevada Oil Patch" and "Oil and Gas Permits"
– Compiled by Jerry Walker, 22-March-2016**

2015 Bimonthly Period	Statewide Oil Production barrels	Average Statewide Daily Oil Production barrels per day	Nevada Division of Minerals Issued Drilling Permits	Wells Drilled or Drilling	
Jan/Feb	47,218	800	#966: Petro-Hunt 1 Jake's Valley, 6-T16N-R60E, White Pine Co, prop TD 11,020' #967: Tetuan 12-29 Mariagness, 29-T15N-R57E, White Pine Co, prop TD 2,500'	0	---
Mar/Apr	48,906	802	---	0	---
May/Jun	47,655	781	#968: Makoil 12-23X Munson Ranch, 12-T9N-R56E, Nye Co, prop TD 5,000' #969: Makoil 13-34 Munson Ranch, 13-T9N-R56E, Nye Co, prop TD 5,200'	1	Tetuan 12-29 Mariagness (Completed as D&A in 2015)
July/Aug	48,323	779	---	1	Bright Sky 1-35 White River Valley
Sep/Oct	44,168	724	---	0	---
Nov/Dec	45,112	740	---	0	---

2015 Statewide Oil Production: 281,382 barrels oil

2015 Average Statewide Daily Oil Production: 771 barrels oil per day

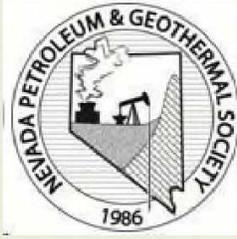
Cumulative Nevada Oil Production (1954-2015): 53,063,364 barrels oil

Number of drilling permits issued in 2015: 4

Number of wells drilled or drilling in 2015: 2

Noble Energy's Nevada Production Data (from Nevada Oil Patch)

Year	Field	Well	Cum BO	Cum BW	Total Days	Avg BOPD	Avg BWPD
2014	Humboldt	M2C-M2-21B Humboldt	2,782	0	145	19	0
	Huntington	K1L-1V Huntington	2,248	0	51	44	0
2015	Humboldt	M2C-M2-21B Humboldt	0	0	0	0	0
	Huntington	K1L-1V Huntington	1,585	4,589	68	23	67
TOTAL	Humboldt	M2C-M2-21B Humboldt	2,782	0	145	19	0
	Huntington	K1L-1V Huntington	3,833	4,589	119	32	39



NPGS Geothermal Field Trip, Saturday April 9, 2016:

Reserve your spot today!

Contact John Snow

Jsnow1@sbcglobal.net (775) 336-8067

Planned Agenda:

We will use personal vehicles for this trip. Boxed lunches will be provided. No charge!

8:00 AM Meet in parking lot of Scheels Sporting Goods, 1200 Scheels Dr, Sparks NV

>Gradient Resources' Patua Geothermal Power Plant (Fernley), tour well field



<http://www.gradient.com/portfolio/patua-nv/>



>Grimes Point Archaeological Area

http://www.blm.gov/nv/st/en/fo/carson_city_field/blm_programs/recreation/grimes_point.html

NAS FALLON



>Fallon, Forge Project, Geothermal Research Observatory

<http://fallonforge.sandia.gov/>

>Enel Green Power North America, Stillwater Solar Geothermal Hybrid Project, Fallon



<http://www.enelgreenpower.com/en-GB/innovation/innovation/>

SPONSORED BY THE FOLLOWING COMPANIES



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:

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www.aapgrms.org

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



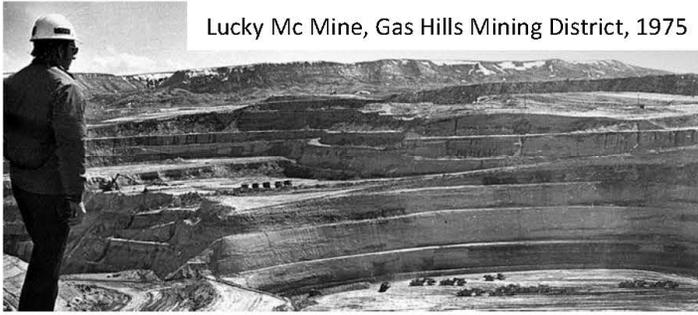


WYOMING GEOLOGICAL ASSOCIATION

PO Box 545, Casper, WY 82602 602 S David
www.wyogeo.org 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>

New Geologic Map—McDermitt Caldera

Preliminary geologic map of the McDermitt caldera, Humboldt County, Nevada and Harney and Malheur counties, Oregon

Authors: **Christopher D. Henry, Steven B. Castor, William A. Starkel, Ben S. Ellis, John A. Wolff, William C. McIntosh, and Matthew T. Heizler**

Year: 2016

Series: Open-File Report 16-1

Format: plate: 41 x 38 inches, color; text: 8 pages, b/w, includes oversize table (15 x 13 inches)

Scale: 1:70,000

The McDermitt caldera of northern Nevada and southeastern Oregon is a large, 16.4 Ma volcanic center that is commonly recognized as the starting point of the Yellowstone hotspot, which migrated northeastward over time to the Yellowstone National Park area where volcanism continues to be intensely active (Pierce and Morgan, 1992, 2009). New geologic mapping and analytical studies by geologists with and working with the Nevada Bureau of Mines and Geology reveal the overall characteristics, dimensions, timing, and relation to mineralization of the caldera. The caldera formed when about 1000 km³ (about 250 mi³) of mostly rhyolite magma erupted from an underlying chamber. So much magma erupted that the overlying ground collapsed into the resulting void, leaving a giant depression—a caldera—that was about 40 km north-south by 22 to 30 km east-west. The giant eruption was preceded by additional volcanism that began about 16.85 Ma and was followed by volcanism that lasted episodically until about 14.9 Ma. Hydrothermal activity related to the volcanism generated numerous known and probable mineral deposits in and around the caldera, especially of the strategically important minerals lithium, uranium, and gallium. Additional, currently unknown areas and types of mineral deposits are likely.

This map was prepared with support from the Nevada Division of Minerals and the U.S. Department of Energy.

View, download, or purchase here:

<http://pubs.nbgm.unr.edu/Prel-geol-McDermitt-caldera-p/of2016-01.htm>

***Outdoor Nevada* on PBS—Jim Faulds on Geothermal Activity**

now posted

The *Outdoor Nevada* episode that aired on March 23, 2016 on the Las Vegas PBS station featured geothermal activity in Nevada, with segments on both the geology and biology of these systems.

NBMG Director and State Geologist Dr. Jim Faulds teamed with UNLV microbiologist Dr. Brian Hedlund for this presentation.

This show has now been posted, and you can watch it here (Episode 7):

<http://www.vegaspbs.org/outdoor-nevada/episodes/>

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.nbmgs.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

- **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).
- NBMG Cartographers will make the final decision on the winning photos.
- Prizes will be awarded for first-, second-, and third-place winners.

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] 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](http://nbmg.maps.arcgis.com) [nbmg.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.nbmgs.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.nbmgs.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

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: **Interdisciplinary Position (Biometrician);**

Announcement Number: OR-DEU-2016-0093;

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

Salary: \$74,950 - \$97,434;

Nevada Petroleum and Geothermal Society; Apr 2016

Applications will be accepted until: **04/08/2016.**

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

<https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=114615>

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>

For questions, or more information:

Charlotte Stock, Publication Sales
Nevada Bureau of Mines and Geology
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Nevada Petroleum and Geothermal Society Calendar: Year 2015-2016	
Apr 5, 2016	<p>Graduate Program of Hydrologic Sciences Spring 2016 Colloquium UNR/NWRA Spring Dinner Forum Best Western Airport Plaza, 5:15-8:00 PM Dr. Ty Ferré, University of Arizona, 2016 Distinguished Darcy Lecturer Seeing Things Differently: Rethinking the Relationship between Data and Models register @ http://www.nvwra.org/2016unr-nwradinnerforum</p>
Apr 7, 2016	<p>NPGS Monthly Dinner Meeting – Thursday Apr 7, 6:30 PM</p> <p>SPEAKER: Dr. Greg Pohll, 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>NPGS Carson Sink Geothermal Field Trip Saturday, April 9, Contact John Snow jsnow1@sbcglobal.net 775.336.8067 Stops at Patua, Grimes Point, Stillwater ENEL, FORGE</p>
Apr 21, 2016	<p>UNR College of Science Discover Science Lecture Series Bob Williams, Hubble Space Telescope Project Leader, April 21</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>NPGS Monthly Dinner Meeting – Thursday May 5, 6:30 PM</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>Nevada BLM Oil & Gas Lease Sale, Reno NV, Jun 14, 2016 Battle Mtn NV District, posting date: March 6, 2016 http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html</p>
Jun 19-22, 2016	<p>AAPG Annual Convention & Exhibition, 2016: Redefining Reservoir BMO Centre @ Stampede Park, Calgary AB http://ace.aapg.org/2016</p>
Aug 5-7, 2016	<p>Wyoming Geological Association 2016 Field Conference Archean-Tertiary Geology and Mineralization in Central Wyoming www.wyogeo.org; 307.237.0027</p>
Sep 1, 2016	<p>NPGS Monthly Dinner Meeting – Thursday Sep 1, 6:30 PM</p> <p>SPEAKER: Rod Prosceno, Grant Canyon Oil & Gas, LLC TOPIC: Nevada – EOR projects – Grant Canyon and Blackburn Fields</p>

Sep 13, 2016	Nevada BLM Oil & Gas Lease Sale, Reno NV, Sep 13, 2016 Winnemucca/Carson City District, posting date: June 16, 2016 http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html
Oct 2-5, 2016	Rocky Mountain Section/Pacific Section Meeting – AAPG 2016 2016 joint RMS-AAPG/PS-AAPG annual meeting Paris Hotel, Las Vegas, Nevada. Host societies: Idaho Association of Professional Geologists and the Nevada Petroleum & Geothermal Society.
Oct 25, 2016	Nevada BLM Geothermal Lease Sale, Reno NV, Oct 25, 2016 Sale posting date: July 27, 2016
Dec 13, 2016	Nevada BLM Oil & Gas Lease Sale, Reno NV, Dec 13, 2016 Ely District, posting date: Sep 14, 2016 http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil_and_gas_leasing.html

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.nbmg.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.
