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.nbmg.unr.edu/nps/

Dinner Meeting: Thursday, Nov 7, 2013

Speaker: **Mark Coolbaugh**
Research Asst Professor, UNR, Reno, NV

Topic: **Blind Geothermal Systems**

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

Cocktail Reception 6:30; Skyline Bar, 14th Floor

Dinner Served at 7:00 PM

Dinner Costs:

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

Buffet style dinner

RSVP FORMAT

RSVP at the following link to make reservations for the November 7th Dinner Presentation:

https://docs.google.com/forms/d/1yeEbsMsleqSCBkeX6--72skhmYvlkFzcY_Oes5eR-yY/viewform

SEE CALENDAR Page 21 for upcoming meetings

► *NPGS Monthly Dinner Meeting – Nov 7, 2013*

NEVADA PETROLEUM AND GEOTHERMAL SOCIETY
THURSDAY, November 7th DINNER MEETING

Blind Geothermal Systems

Geothermal systems have always been "blind" to some degree in the sense that subsurface geothermal reservoirs are commonly laterally displaced significantly from their surface manifestations. As with other natural resources, with time, new geothermal resource discoveries will be increasingly "blind" as the more obvious targets become fully explored. Nevada and the Great Basin are already notable for containing a high percentage of fully "blind" geothermal systems (those without any surface manifestations), many of which are currently producing electricity. And if geothermal power can be produced from deep sedimentary basins in the Great Basin, new sense will be given to the term "blind geothermal system". The challenges and lessons learned in finding productive blind geothermal systems in the Great Basin have the potential to be exported to other portions of the world.

This talk will review why geothermal systems in the Great Basin tend to be blind, review how most of the blind geothermal systems in the Great Basin have been discovered to date, and discuss what methods are most likely to be effective for finding blind geothermal systems in the future.

► *About the Speaker: Mark Coolbaugh*

B.Sc. Colorado School of Mines, Geological Engineering
M.Sc. University of Arizona, Geological Engineering
Ph.D. University of Nevada, Reno, Geology

Past Experience:
20 years mineral exploration and production experience, US, Asia, South America, Europe
10 years geothermal research and exploration, North and South America, Europe

Current positions:
Chief Geoscientist, Renaissance Gold Inc.
Adjunct Research Assistant Professor, University of Nevada, Reno
Chief Geoscientist, Imageair, Inc.

Hobbies: 1) rock collecting and 2) annoying people by trying to speak Spanish

► *In Memorium, John W. Erwin, Mar 7, 1924-Oct 3, 2013:*

John Erwin was a member of the Nevada Petroleum Society from 1989 – 2008. He worked as a geophysicist for the Nevada Bureau of Mines & Geology for many years. His gravity maps have been used extensively for oil & gas exploration in Nevada. His obituary follows:

John Winton Erwin
Professor Emeritus of Geophysics, University of Nevada, Reno

Died in Reno, Nevada on October 3, 2013, of Alzheimer's disease. A native of Chicago, Illinois, John was born March 7, 1924 of John C. and Jeanie W. Erwin. In 1935, the family moved from Chicago to a farm near Keeler, Michigan. John attended Hartford High School, Hartford, Michigan, graduating salutatorian of the class of 1942. He enlisted and served with the U.S. Marine Corps during 1943 to 1946. On April 15, 1946, he married his high school sweetheart Patricia Young of Hartford, Michigan. They were wed sixty-one years until Patty's death in October 2007. John earned a Bachelor of Science in Engineering Physics from Michigan Technological University, Houghton, Michigan, in 1949. He earned his Masters in Geophysics from the Colorado School of Mines, Golden, Colorado, in 1954.

During his studies at the Colorado School of Mines, John worked for Anaconda Copper Company and Phelps Dodge Corporation. Following graduation, he worked for Dow Chemical Company in Midland, Michigan, and later for ASARCO in its Salt Lake City office and at its exploration projects in Arizona, Missouri, Nevada, Utah and other western states. Beginning in 1961, he was employed by Hercules Aerospace Company in Salt Lake City, Utah, as part of the design team for the Sprint anti-ballistic missile.

In 1964, John joined the faculty of the Mackay School of Mines of the University of Nevada as a professor of geophysics and as a researcher with the Nevada Bureau of Mines and Geology. On his retirement in June 1985, he was named Professor Emeritus. Professor Erwin published numerous works in the geophysical field. After his retirement from UNR he continued to teach mathematics at Truckee Meadows Community College and Western Nevada Community College.

John was the first in his family to graduate from college. He valued and encouraged education as evidenced by the twenty-four (and counting) college, graduate and doctoral degrees earned by his children and grandchildren, eight of the degrees awarded by the University of Nevada.

Erwin was a registered engineer in the State of Nevada, a member of the American Institute of Mining, Metallurgical, and Petroleum Engineers, the Society for Mining, Metallurgy & Exploration, the Arizona Geological Society, the Geological Society of Nevada (serving as Chairman in the early 1970's), and the Marina Bay Yacht Club, Richmond, California. Proud of his service as a United States Marine, he belonged to the Navy League and was a life member of the American Legion. For many years he was a member of the Masonic Golden Lodge F & AM/50, St. John's Presbyterian Church and the First Congregational Church, Reno, NV.

Mr. Erwin was predeceased by his wife Patricia Jane in 2007. He is survived by sons James W. Erwin, Thomas P. (Molly) Erwin, John A. (Sherri) Erwin, and daughters Susan M. (Brian) Buckley, Debra Ann (Pete) Padgett; fourteen grandchildren, two step

grandchildren, eleven great grandchildren, and former daughters-in-law Cheryl L. Ehrke and Michelle F. Hall.

A Celebration of Life service will be held at 2:30 p.m. on Friday, October 25, 2013, at Mountain View Mortuary, 435 Stoker Avenue, Reno, Nevada, followed by a Military Internment Service at Mountain View Cemetery. Contact Mountain View Mortuary for details 775 788-1299.

In lieu of flowers the family requests that memorials may be made in John's name to the Mackay School of Earth Sciences and Engineering, Mail Stop 162, University of Nevada, Reno 89557.

Professor Erwin enjoying an old school look at gravity in the Silver State.

► *NPGS Field Trip Oct 12-13, 2013:*

Geothermal and Petroleum Developments in Several Extensional Basins of the Central Walker Lane, Nevada

Chairman: Larry Garside, Mail Stop 0178, Nevada Bureau of Mines and Geology, University of Nevada Reno, Reno, NV 89557-0178. email: lgarside@unr.edu, telephone: (775) 784-6693.

Looks & sounds like some of us missed a great trip. Thank you to everyone who planned it, worked it, attended, & made it happen. Enjoy the following piece submitted by Scott Hector and photos submitted by Terri Garside and Jack Hursh. Thank you!

****

A Night at the Round Table
Scott Hector

Seven men and women, almost all geologists, walked into the Refinery Restaurant in Hawthorne, Nevada. We had eaten there already, but tonight marked the end of the two-day field trip of the Nevada Petroleum and Geothermal Society, and we knew this would be the last night at what had turned out to be a pretty darn good restaurant.
Our waitress, Amy, asked how many there would be. We told her "seven" but almost at the same time four other members of our group entered through the other door to the restaurant. That made it a total of eleven, and there were only eight chairs laid out for the round table. So, four were sent over to a rectangular shaped table. Terri Garside, the wife of our fearless leader of the field trip, Larry Garside, motioned the others over. It was easy to find some unused chairs, and we managed to get everybody to fit in around the one table.
Andrew Cullen ordered a couple of bottles of wine, and once it was poured and we each had a glass, we clinked to the success of the field trip and to the first oil production in southwestern Nevada. After all, we had just visited the "Empire" # 2-12 Paradise Unit oil well. It was making about 4 barrels a day of 26 API gravity, high-paraffin oil. With a pour point of 105° F, the oil went solid at any temperature below that, and the oil samples in mason jars that we saw at the rig could be turned upside down, and the oil would sit there, upside down, and not move. Fortunately, the wine at our table had a pour point that was just fine, and we poured out the contents until they were upside down and ordered a third. Once again, we proved that oil and wine do not mix.
I think the highlight of the evening was the discussions of "Cap' Maurer. Cap lives in Gabbs, Nevada, not far from the oil wells, and he has pushed tools on all three wells that were drilled on the Cobble Cuesta anticline. Cap told us about his roots in California, where he was raised near the beach in southern California, and then he told us about his Nevada roots. Alfalfa roots, that is. He led an exciting discussion, if there can be one, about how the use of sulfate in the soil had allowed an area known for poor performance of the alfalfa to greatly improve by giving the soils the additives that were needed to change the chemistry so that the roots could break through certain layers and become much more prolific crops. He said that the downside was that when he started doing this his children were young, and the runoff from the new soils changed chemistry enough that it killed the pollywogs in the small canals that transferred the water. I told Cap that I was upset by this, but I still liked him, even if he did invent a "pollywogicide". It was a good story, and a reminder that if you understand the geology of the rocks and the resulting soils that you can greatly improve your farming.
We rehashed the results of the field trip as well. Cap decided that the "Empire" # 2-12 well was a success due to the use of potassium formate in the drilling fluid. I did not know of this, but mentioned that at times I had used potassium chloride to control the swelling clays. I guess Cap felt that the first two wells drilled on the Cobble Cuesta anticline might also have been "successful" if they had also been drilled with the potassium formate. Anyway, the operator plans to drill another well soon. If it hits big, there will be thousands of wells to drill and about 2 bazillion barrels of oil to recover (this estimate is from me, not from Dr. Al Pekarek).

Well, let's get back to our young waitress, shall we? Amy was very attentive, and it was not long before someone asked her about her history. She told us she was living in Hawaii until recently when she saw an ad on Craigslist from someone that would trade their trailer in Hawthorne, Nevada for a certain type of car. Amy owned such a car, and apparently she had some desire to see another part of the country. So, she left the lush, green lava fields of Hawaii for the barren and arid lava fields of Hawthorne. She indicated that Hawthorne was "OK" as a place to be, and probably as good if not better than Hawaii.
What we did know in our group was that she is a great waitress. To let her know this, we made sure that she got a good tip. We all pulled the money out of our wallets and each of the eleven made sure there was some extra for the tip. Cap

collected the money, but refused to tell me exactly how much extra was in there for Amy. He simply nodded that it was enough and then said “She has been blessed”. Actually, I think the reverse occurred as well: Amy did a great job, and at the end went around the round table and hugged each one of us. We were all blessed. Scott T. Hector

Chris Henry, Photo by J Hursh

Jerry Walker talk @ rig, Photo by J Hursh

Photo by T Garside

Group photo by T Garside

Photo by T Garside

Pilot Mtns near Rhodes Salt Marsh, Photo by J Hursh

Photo by T Garside

Coolbaugh (Best Hat), Rhodes Salt Marsh, Photo by J Hursh

Photo by T Garside

Wild Rose Geothermal Plant, Photo by J Hursh

Gabbs Valley from Cobble Cuesta, @ Black Hills, Mt. Grant snow covered; Photo by J Hursh

► *WELCOME NEW NPGS MEMBERS:*

Belmontes, Hugo		Las Vegas, NV
Blake, Karen	Paul Graham Drlg/Hobby Energy	Rio Vista, CA
Donovan, David	AquaPetrus	Las Vegas, NV
Garside, Terri		Reno, NV
Hector, Scott	Paul Graham Drlg/Hobby Energy	Rio Vista, CA
Hursh, Jack	NV Bureau of Mines & Geology	Reno, NV
Lovekin, James (Jim)	GeothermEx, Inc. (Schlumberger)	Richmond, CA
O'Donnell, Jim	BC-Geophysics	Boulder City, NV
Sodersten, Dan	Triple S Resources, Inc.	Hockley, TX
Sodersten, Sandra	Triple S Resources, Inc.	Hockley, TX
Weiss, Steven	Consulting Geologist	Reno, NV

► *NPGS Christmas Party – Friday, Dec 6, 2013:*

Mark your calendars! We'll be celebrating on Friday, Dec 6 in the Skyline Room at the Ramada. Details will be coming soon. Plan to join us as we raise our glasses to toast the journeys we've traveled & the adventures that lie ahead.

► *New NPGS Publication Listing:*

Note the new Publications Listing for NPGS included in this newsletter, prepared by Charlotte Stock, NBMG & Sam Limerick. The Guidebook from the 2013 Field Trip is included in the listing. Thank you, Charlotte & Sam!!

► *Next Nevada BLM Geothermal Lease Sale; Nov 19, 2013:*

http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/geothermal0/ggeothermal_leasing.html

The most recent geothermal lease sale for Nevada was in January 2013. The upcoming geothermal lease sale will be held November 19.

Six (6) parcels will be offered in Pershing, Mineral & Churchill Counties, for a total of 6,360 acres: 33N 25E; 23N 27E; 4N 32,33E; 32N 33E; 22N 35E; 21N 38E.

► *Scheduled BLM Oil & Gas Lease Sales:*

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
December 10, 2013	Ely	March 15, 2013	September 11, 2013	October 11, 2013
March 11, 2014	Elko/Southern Nevada	June 13, 2013	December 11, 2013	January 10, 2014
June 10, 2014	Battle Mountain	September 13, 2013	March 12, 2014	April 11, 2014
September 9, 2014	Winnemucca/Carson City	December 13, 2013	June 11, 2014	July 11, 2014
December 9, 2014	Ely	March 14, 2014	September 10, 2014	October 10, 2014

*EOI = Expression of Interest

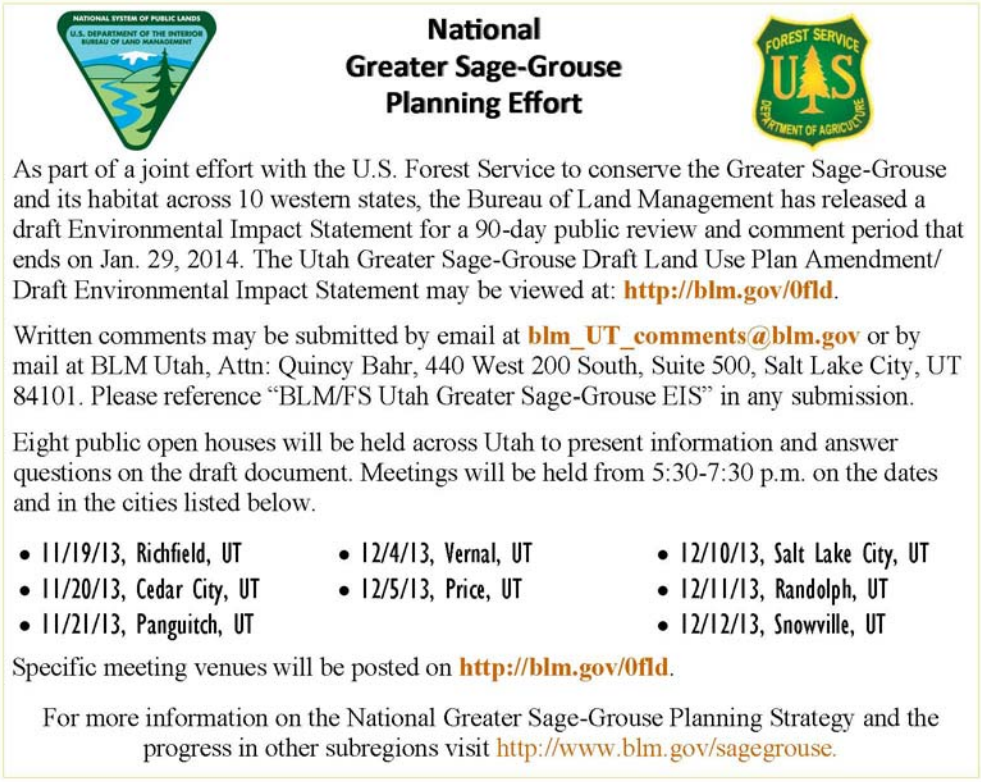
http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil___gas/oil_and_gas_leasing.html

Dec 10 NV BLM Oil & Gas Lease Sale: 178 parcels listed (303,334 acres) with 149 pre-sale offers. Check the website for deferments and updates. The country's going to the birds…….

► *Nov-Dec 2013 Oil & Gas Lease Sale Schedule:*

Nov 05 North Dakota (State)
Nov 05 Wyoming (BLM)
Nov 06 Wyoming (State)
Nov 06 Oklahoma (State)
Nov 14 Colorado (BLM)
Nov 19 New Mexico (State)
Nov 19 Utah (BLM)
Nov 21 Colorado (State)
Dec 03 Montana (State)
Dec 10 Nevada (BLM)
Dec 11 California (BLM)
Dec 12 Eastern States (BLM)
Dec 17 New Mexico (State)

► ***News from The Bird:***



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

From: Charlotte Stock

The theme of Earth Science Week was "Mapping Our World," and NBMG celebrates the week with two new geologic maps and an update on NBMG's participation in the OneGeology project—plus the upcoming 2014 Nevada Geology Calendar.

New Geologic Maps – in Elko and Clark Counties

Open-File Report 13-5

Preliminary Geologic Map of the **Tuscarora Geothermal Area**, Elko County, Nevada, by Gregory M. Dering and James E. Faulds, 2013

Tuscarora is an amagmatic geothermal system that lies in the northern part of the Basin and Range province, ~15 km southeast of the Snake River Plain and ~90 km northwest of Elko, Nevada. The Tuscarora area is dominated by late Eocene to middle Miocene volcanic and sedimentary rocks, all overlying Paleozoic metasedimentary rocks. A geothermal power plant was constructed in 2011 and currently produces 18 MWe from an ~170°C reservoir in metasedimentary rocks at a depth of 1740 m. Two distinct structural settings at different scales appear to control the geothermal field. The regional structural setting is a 10-km wide complexly faulted left step or relay ramp in the west-dipping range-bounding Independence–Bull Run Mountains normal fault system. Geothermal activity occurs within the step-over where sets of east- and west-dipping normal faults overlap in a northerly trending accommodation zone. The distribution of hot wells and hydrothermal surface features, including boiling springs, fumaroles, and siliceous sinter, indicate that the geothermal system is restricted to the narrow (< 1 km) axial part of the accommodation zone, where

permeability is maintained at depth around complex fault intersections. Shallow up-flow appears to be focused along several closely spaced steeply west-dipping north-northeast-striking normal faults within the axial part of the accommodation zone. The recognition of the axial part of an accommodation zone as a favorable structural setting for geothermal activity may be a useful exploration tool for development of drilling targets in extensional terranes, as well as for developing geologic models of known geothermal fields. In addition, the presence of several high-temperature systems in northeastern Nevada demonstrates the viability of electrical-grade geothermal activity in this region despite low present-day strain rates as indicated by GPS geodetic data. Geothermal exploration potential in northeastern Nevada may therefore be higher than previously recognized.

1:24,000; two plates including cross sections, available on the Web:
http://www.nbmg.unr.edu/sales/pbsdtls.php?sku=OF13-%205

Open-File Report 13-6

Preliminary Geologic Map of the **Valley of Fire East Quadrangle**, Clark County, Nevada, by Thomas W. Muntean (Geology Department, Adrian College, Adrian, MI), 2013

The Valley of Fire East quadrangle geologic map is a compilation of previous maps (1:62,500- to 1:250,000-scale maps) from the region and new mapping. New geologic mapping was primarily conducted to resolve the local stratigraphy of, and structural features affecting, the late Neogene Muddy Creek Formation (MCF) at the 1:24,000 scale. Compilation mapping was predominantly used to improve the resolution of pre-MCF unit contacts and exposures within the map area.

1:24,000; plate and text, available on the Web:
http://www.nbmg.unr.edu/sales/pbsdtls.php?sku=OF13-%206

NBMG's Geologic Mapping Presence in the World – OneGeology

"OneGeology is an international initiative of the geological surveys of the world. This ground-breaking project was launched in 2007 and contributed to the 'International Year of Planet Earth', becoming one of their flagship projects.

Thanks to the enthusiasm and support of participating nations, the initiative has progressed rapidly towards its target - creating dynamic geological map data of the world, available to everyone via the web. We invite you to explore the website and view the maps in the OneGeology Portal." (from OneGeology website)

The Nevada Bureau of Mines and Geology holds a record: we have added our STATEMAP digital conversions to the OneGeology website (http://www.onegeology.org/), and currently NBMG has more features than any other country in the world. The world map is found by going into the OneGeology portal (http://portal.onegeology.org/)

With the efforts of Kathryn Ryan, Gary Johnson, Lisa Shevenell, and Selena Large, we have added 27 feature groups (map scale groups). United Kingdom comes in second with 26 feature groups. NBMG has added the various scales of geologic mapping from 1:500,000-scale (Stewart and Carlson 1:500K) up to 1:12,000-scale maps. This effort reflects over 200 geologic maps that are represented by age of the geologic unit. The data is represented in each scale by features of contacts, faults, and geologic units. There is much more to be added, and as time and funds allow, we will update. OneGeology runs a little slow, but the information represented is valuable.

Earth Science Week Field Trip – New Plant Guide Posted

Title: Mapping the Geology around the Desert Research Institute and Truckee Meadows Community College
Trip leaders: Jonathan G. Price, D.D. LaPointe, David A. Davis, and Craig M. dePolo (Nevada Bureau of Mines and Geology), assisted by Christopher Ross, David Boden, Donald Hudson, and Elisabeth Price
Trip guide (Educational Series 53):
http://www.nbmg.unr.edu/sales/pbsdtls.php?sku=E-53

Everyone really enjoyed the annual Earth Science Week field trip this past weekend, October 12-13. It was even fun geo-tripping in the cool rain on Sunday morning.

Chris Ross (BLM) was on the trips both days to help point out the plant types in the area and the interaction of plants and geology. **A supplemental guide used for the field trip has now been included as an appendix to Educational Series 53 on the NBMG website:**

Appendix 1 to E53: Plants around the DRI-TMCC Campuses, photos by Alexander D. Price and Jonathan G. Price, plant identifications by Christopher Ross and Elisabeth M. Price
http://www.nbmg.unr.edu/dox/e53.pdf **(pages 13-38)**

2014 Nevada Geology Calendar – *Coming Soon!*

Enjoy unique Nevada landscapes with this impressive new calendar that will be ***available soon*** and features a different geologic topic each month: Precarious Rocks, Geothermal, Sandstone, Basin and Range, Limestone, Tufa, Glaciation, Ash-Flow Tuff, Igneous Dikes, Canyons, Modern Mining, and Earthquake Faults.

You can get a *sneak peek* of the images at this link:
http://www.nbmg.unr.edu/_docs/Calendar_2014_Ad.pdf

The 2014 Nevada Geology Calendar was produced by Nevada Bureau of Mines and Geology in cooperation with Geological Society of Nevada. It was designed by Jack Hursh, Jennifer Mauldin, Chris Henry, Nick Hinz, and the Geological Society of Nevada photo contest entrants.

Ordering information:

You can **place an order** for other publications or check for shipping charges through our shopping cart at
http://www.nbmg.unr.edu/Departments/PubSales/PubSales.html

Subscribe to our blog: http://nbmg.posterous.com

Charlotte Stock
NBMG Publication Sales, University of Nevada, mailing address for US Mail, Fed Ex, and UPS:
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
Directions to office, www.nbmg.unr.edu

Nevada Petroleum and Geothermal Society Sponsorship Request for 2013-14

On behalf of the Nevada Petroleum and Geothermal Society (NPGS) Board of Directors, I invite you and your firm to join our NPGS Sponsorship Drive for the 2013-2014 term.

Annual support for the NPGS from firms active in Nevada is necessary so that this Society can continue to perform our programs, including distribution of research awards to University of Nevada, Reno, University of Nevada, Las Vegas, and other graduate students performing research relevant to the geology of the Great Basin, monthly professional dinner presentations, and community outreach activities such as the Nevada Bureau of Mines'-UNR's Earth Science Week Field Trips.

You and your firm's continual support at any level clearly shows your commitment to our profession. We have three sponsorship levels available this year:

Gold Level Sponsors will receive numerous benefits which allow them to maximize their positions as leaders in our local geological community. As a Gold Level Sponsor, your Company will be prominently displayed on a full page of our monthly newsletter and on our web site (http://www.nbmg.unr.edu/nps/). We will advertise opening positions with your Company at any time that you request during the year. We will also run your Company's promotional slide show at a monthly dinner where we will present you with an elegant commemorative plaque that you can proudly display at your office. Please also consider developing a short dinner showcase that highlights your firm or is of general interest to the membership. Gold Level Sponsorship costs only $500 per year.

As a **Silver Sponsor**, your Company's business card will be displayed in a section of our monthly newsletter and on our website. We will advertise opening positions with your Company as requested at any time during the year. Silver Sponsorship costs $300 per year.

Corporate Sponsorships are flexible. Corporate Sponsors will be able to provide NPGS with any amount of their choosing. Sponsors providing greater than $500 will receive all the benefits as a Gold Level Sponsor. Sponsors providing less than the Gold Level amount will receive name recognition in both our website and our monthly newsletter.

Please help to sponsor the NPGS by filling out the attached Sponsorship Application Form and telling us where you would like to designate your sponsorship dollars. NPGS is a 501c3 non-profit organization. Contact your tax advisor to determine which portion(s) of your donation is (are) deductible.

We also have opportunities for you and your Company to host the Ramada bar during our dinner meetings. If you would like to host the bar, please contact me prior to one of the meetings at 775-200-5143 to set that up. Or you can provide a donation to our NPGS Scholarship fund which has provided significant assistance to our University of Nevada Mines and Geology students, or even to our General Fund, which helps us to provide you with our informative dinner meetings. Please designate the desired amount(s) on the attached Sponsorship Application.

As always, we welcome your suggestions on how our Society's programs and activities can be improved. More importantly, we welcome the participation of you and your firm's staff at our monthly dinner presentations and at all of our events. If you know of anyone who is interested in serving in a leadership position on our Society's Board of Directors, please encourage them to contact us. Their involvement will ensure a vibrant future for the Nevada Petroleum and Geothermal Society.

We look forward to working with you to help make our Society the best that it can be. Please contact me at 775-200-5143 or email me at jkareck@lumosengineering if you have any questions or require any additional information.

Judy M. Kareck, P.E., Vice-Chair, Nevada Petroleum and Geothermal Society

NEVADA PETROLEUM AND GEOTHERMAL SOCIETY

2013-2014 Sponsorship Application

Nevada Petroleum and Geothermal Society
P.O. Box 11526
Reno, NV 89510
Minden, Nevada 89423

Firm/Agency Name: _____
Mailing Address: _____
Phone Number: _____
Fax Number: _____

	Sponsor Name	Email Address
Primary Contact (1)		
Secondary Contact (2)		

Indicate Level of Sponsorship Desired:

(3)	GOLD		$500
(4)	SILVER		$300
(5)	CORPORATE		$

Indicate desired amount.

Indicate Where You would like to Designate your Sponsorship Dollars:

A. NPGS - University of Nevada Mines and Geology Student Support	
B. NPGS General Support	
Total Amount Designated will Add up to Total Amount Sponsored	$

(1) (2) Primary and Secondary Contacts represent the individuals who will serve as direct liaison with the NPGS Board of Directors. They will be counted on to distribute information, solicit involvement, and provide feedback as to what they would like to see this Society accomplish. They can also develop leadership skills by participating and volunteering in NPGS functions.

(3) GOLD Level Sponsors receive numerous benefits which allow them to maximize their positions as leaders in our local geological community. As a GOLD Sponsor, your Company logo and business write-up will be prominently displayed in a full page of our monthly newsletter and on our website (http://www.nbmg.unr.edu/nps/). NPGS will advertise opening positions with your Company at any time during the year. We will present you with an elegant commemorative plaque that you can proudly display at your office showing your commitment to this community. Please also consider developing a brief dinner showcase that either highlights your firm's expertise or is of general interest to the membership. GOLD Level Sponsorship costs $500 for the 2013-2014 year.

(4) As a SILVER Level Sponsor, your Company's business card and/or logo will be displayed on a portion of our monthly newsletter and on our website. We will advertise opening positions with your Company at any time during the year. SILVER Level Sponsorship costs $300 for the 2013-2014 year.

(5) CORPORATE Level Sponsors can provide the NPGS with any amount of their choosing. Amounts exceeding $500 will be given the same benefits as the GOLD Level. Amounts less than $300 will be given name recognition in both our website and monthly newsletter.

Notes: Checks written to the Society should be written to: Nevada Petroleum and Geothermal Society and mailed to Steve Foster, Treasurer, at the above address.

The NPGS is a 501c3 non-profit organization. Contact your tax advisor to determine which portion(s) of your donation is (are) deductible.

APPLICATION FOR MEMBERSHIP

Name _____

Occupation/Title _____

Company/Affiliation _____

Work Address _____
Street City State Zip Code

Residence Address _____
Street City State Zip Code

Preferred Mailing Address? ☐ **WORK** -or- ☐ **RESIDENCE**

Work Phone _____ Residence Phone _____ Fax _____

Mobile Phone _____ Email _____

Member of AAPG? ☐ **YES** -or- ☐ **NO**

Professional References – *list two references with phone numbers and addresses*

1) Name_____Phone _____

Address _____
Street City State Zip Code

2) Name_____Phone _____

Address _____
Street City State Zip Code

Education – *list colleges and universities attended, degree(s) received, and date of degree(s) (OPTIONAL)*

_____

_____

_____

Membership Type

☐	ACTIVE	$20.00/year
☐	ASSOCIATE	$15.00/year
☐	STUDENT	$10.00/year
☐	LIFE	$200.00 *(one-time payment)*

Please make check payable to:

Nevada Petroleum Society
P.O. Box 11526
Reno, NV 89510-1526

Signature _____

Date _____

DO NOT COMPLETE

For NPS Membership Committee Signatures Only

_____

_____

Nevada Petroleum and Geothermal Society

Publication Price List - October 2013

Paper	CD-ROM	Download from Dropbox	Title
			SPECIAL VOLUMES
NPS1 n/a	**NPS1c** $80.00	**NPS1y** $65.00	Oil Fields of the Great Basin (1994) R.A. Schalla and E.H. Johnson, editors, 31 papers on regional and field specific geology, 5 plates, soft cover with plastic comb binding, 380 p.
NPS2 n/a	n/a	n/a	Membership Directory (only available free on the Web at http://www.nbmg.unr.edu/nps/membershipdir.htm)
NPS15 ~~$20.00~~ $5.00	n/a	n/a	TerraScan's Geologic Map of the Eastern Great Basin, Nevada and Utah (1978, rev. 1987) compiled and edited by E.L. Howard, 3 sheets (includes cross-sections) $20.00/NPS or $25.00/non-NPS, order by phone only for discounted price of $5.00
NPS21 n/a	**NPS21c** $35.00	**NPS21y** $20.00	Carboniferous–Permian (Late Paleozoic) Hydrocarbon System, Rocky Mountains–Great Basin Region, U.S., Major Historic Exploration Objective (2001, updated 2003) J. Peterson, RMAG Open-File Report, 54 p., 45 illustrations
			FIELD TRIP GUIDEBOOKS
NPS3 n/a	**NPS3c** $35.00	**NPS3y** $20.00	Oil Fields, Production Facilities and Reservoir Rocks of Northern Nye County, Nevada (1989) compiled by W.J. Ehni and D.M. Evans, 8 abstracts and papers, 30 p.
NPS4 $15.00	**NPS4c** $35.00	**NPS4y** $20.00	Oil Fields and Geology of the Pine Valley, Eureka County Area, Nevada (1990) D.M.H. Flanigan, L.J. Garside, and M. Hansen, editors, 15 papers and abstracts, 74 p. (xerox copy only – unbound)
NPS5 n/a	**NPS5c** $35.00	**NPS5y** $20.00	Geology of White River Valley, the Grant Range, Eastern Railroad Valley and Western Egan Range, Nevada (1991) D.M.H. Flanigan, M. Hansen, and T.E. Flanigan, editors, 10 papers and abstracts, 74 p.
NPS6 $25.00	**NPS6c** $40.00	**NPS6y** $25.00	Structural Geology and Petroleum Potential of Southwest Elko County, Nevada (1992) J.H. Trexler, Jr., T.E. Flanigan, D.M.H. Flanigan, M. Hansen, and L.J. Garside, editors, 9 papers, 2 plates, 96 p.
NPS7 $33.00	**NPS7c** $48.00	**NPS7y** $33.00	Structural and Stratigraphic Relationships of Devonian Reservoir Rocks, East Central Nevada (1993), C.W. Gillespie, editor, 15 papers, 3 plates, 203 p.
NPS8 n/a	**NPS8c** $40.00	**NPS8y** $25.00	Dating of Pre-Tertiary Attenuation Structures in Upper Paleozoic and Mesozoic Rocks and the Eocene History in Northeast Nevada and Northwest Utah (1994) C.H. Thorman, C.J. Nutt, and C.J. Potter, editors, 11 papers, 125 p.
NPS9 n/a	**NPS9c** $55.00	**NPS9y** $40.00	Structural and Stratigraphic Investigations and Petroleum Potential of Nevada, with Special Emphasis South of the Railroad Valley Producing Trend (1994) S.W. Dobbs and W.J. Taylor, editors, two volumes bound as one, 13 papers, 22 plates, 281 p.

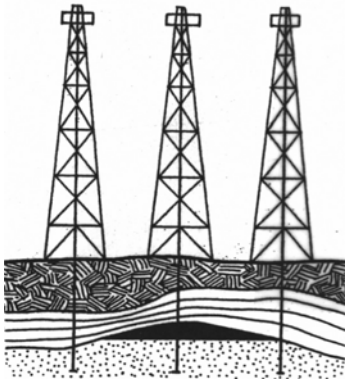
Paper	CD-ROM	Download from Dropbox	Title
NPS10 $25.00	**NPS10c** $40.00	**NPS10y** $25.00	Mississippian Source Rocks in the Antler Basin of Nevada and Associated Structural and Stratigraphic Traps (1995) M.W. Hansen, J.P. Walker, and J.H. Trexler, Jr., editors, 16 papers and 7 abstracts, 166 p.
NPS11 $25.00	**NPS11c** $40.00	**NPS11y** $25.00	Cenozoic Structure and Stratigraphy of Central Nevada (1996) W.J. Taylor and H. Langrock, editors, 11 papers, 122 p.
NPS12 $25.00	**NPS12c** $40.00	**NPS12y** $25.00	The Roberts Mountains Thrust, Elko and Eureka Counties, Nevada (1997) A.J. Perry and E.W. Abbott, editors, 4 papers, 2 abstracts and reference papers/abstracts, 86 p.
NPS13 n/a	**NPS13c** $40.00	**NPS13y** $25.00	Hydrocarbon Habitat & Special Geologic Problems of the Great Basin (1998) D.E. French and R.A. Schalla, editors and co-chair
NPS14 $35.00	**NPS14c** $50.00	**NPS14y** $35.00	Cenozoic Geology of the Northern Colorado River Extensional Corridor, Nevada and Arizona: Economic Implications of Extensional Segmentation Structures (1999) J.E. Faulds, editor, 183 p., 3 color plates
NPS16 $30.00	**NPS16c** **$45.00**	**NPS16y** $30.00	Structure & Stratigraphy of the Eureka, Nevada Area (2001) Marilyn S. Miller and Jerome P. Walker, editors, 108 p., 11 color plates
NPS17 n/a	**NPS17c** $50.00	**NPS17y** $35.00	Detachment and Attenuation in Eastern Nevada and its Application to Petroleum Exploration (2002) W. Ehni and J. Faulds, editors, 163 p.
NPS18 $25.00	**NPS18c** $40.00	**NPS18y** $25.00	Oil, Gas, and Geothermal Occurrences in Northwestern Nevada (2003) S. Foster, editor, 102 p.
NPS19 n/a	**NPS19c** $50.00	**NPS19y** $35.00	Megabreccias and Impact Breccias of East Central Nevada (2004) C.W. Gillespie and S. Foster, editors
NPS20 n/a	NPS20c n/a	NPS20y n/a	Great Basin Paleozoic Carbonate Platform: Facies, Facies Transitions, Depositional Models, Platform Architecture, Sequence Stratigraphy, and Predictive Oil and Gas Reservoir and Mineral Host Models (2006) H.E. Cook and J.J. Corboy, 129 pages, out of print (report from USGS Open-File Report 2004-1078, **free on Web at http://pubs.usgs.gov/of/2004/1078/)**
NPS22 n/a	**NPS22c** $40.00	**NPS22y** $25.00	Geology, Geothermal Resources and Petroleum Exploration of Neogene Basins in the Reno, Nevada Area (2007, 2nd ed., includes two papers not in 1st ed.) S. Limerick, editor, 7 papers, 3 reprints, and roadlog, 140 p.
NPS23 $25.00	**NPS23c** $40.00	**NPS23y** $25.00	Sedimentology and Tectonic Setting of the Late Cretaceous to Eocene Sheep Pass Formation in the Southern Egan Range (2008) P. Druschke, trip leader; J. Trexler, Jr., editor
NPS24 $30.00	**NPS24c** $45.00	**NPS24y** $30.00	Geothermal and Petroleum Developments in Several Extensional Basins of the Central Walker Lane, Nevada (2013) L.J. Garside, editor, 11 papers, 131 p.

These publications are only available from the Nevada Bureau of Mines and Geology (NBMG). If a publication is out of print or unavailable, it is marked "n/a" (not available). **Please check with us for the most current prices.** Thanks.

NBMG contact information:
Phone: (775) 682-8766
Fax: (775) 784-6690
Web: http://www.nbmg.unr.edu
Web: http://www.nbmg.unr.edu/nps/

Nevada Petroleum and Geothermal Society; Nov 2013

Oil and gas resources from NBMG



The following publications are available from the Nevada Bureau of Mines and Geology. NBMG publications that are underlined are also available *free on the Web* **at http://www.nbmg.unr.edu/.**

Oil and gas information page on the NBMG website
http://www.nbmg.unr.edu/Oil&Gas/index.html

Bulletins

B104 Oil and gas developments in Nevada**: Garside, Hess, Fleming and Weimer (1988), $15.00,** ***for updates, see OF01-7, OF04-1, and M162***

Educational Series

E-6 **Oil and gas in Nevada** (Student book for grades 4-8, 23 pages) $3.45
E-24 **Nevada oil**: Division of Minerals (Brochure, 1996) free

Lists

L-8 **List of oil and gas wells drilled in Nevada since 1907**: Hess, Davis, and Boldi (2001, updated 2003) *superseded by OF04-1*, *see also OF01-7*
L-12 **Nevada oil and gas well catalog (NVOILWEL)**, *superseded by OF04-1*, *see also OF01-7* Complete list of Nevada oil and gas well exploration data, 1906-present. Listed logs and cuttings are housed at NBMG. Shows, geologic tops and tests are given when available.

Maps

M162 **Petroleum data map of Nevada**: Garside and Hess (2007), 1:1,000,000, $15.00

Mineral Industry Series

The Nevada Mineral Industry is **published annually**, beginning in 1979. Each volume has a **section on oil and gas** in Nevada. Most of these reports are available *free on the Web at* http://www.nbmg.unr.edu*/.*

Open-File Reports

OF83-5 **Nevada oil shale**: Garside, 10 pages, $4.00 (for more oil shale information, see also USGS MF-1546 and MF-2091)
OF86-13 **Nevada petroleum production statistics**, 1954-1986: Hess, Loomis and Garside, 14 pages, $5.00
OF92-5 **Nevada oil and gas source-rock database**: Hess, compilation of source-rock analyses performed on cuttings samples taken at varying depth intervals from oil and gas exploration wells in Nevada up to 1992, complete print-out, $20.00
OF96-6c **Nevada oil and gas wells, 1907-1996**: 1:1,000,000 color digital map of Nevada showing major roads, county boundaries, and locations of oil wells drilled since 1907, original printout, $20.00, *see also OF01-7, M162*
OF01-7 **Nevada oil and gas well database map**: Hess, CD and 4 page text, $15.00 Contains the following: L-12; updated OF96-6, partial; L-8; B104 text; digital base layers of Nevada data in Shapefile and Arc/Info export file format designed for use at scale 1:1,000,000 (county, towns, roads, USGS topo boundaries for 1:100,000 and 1:24,000, Township and Range); georeferenced raster graphic of the Nevada state base map, B&W, scale 1:1,000,000; 18 USGS digital raster graphic maps (DRG), 1:250,000-scale, topo maps in tiffw format
OF00-2 **Hydrocarbon assessment of the Yucca Mountain vicinity, Nye County, Nevada**: French, 78 pages and 4 plates, $44.40
OF04-1 **Nevada oil and gas well database (NVOILWEL):** Hess (2004), $86.40 for photocopy
OF07-7 **Assessment of the potential for carbon dioxide sequestration with enhanced oil recovery in Nevada**: LaPointe, Price, and Hess (2007), 24 pages, $7.20
OF11-2 **Qualitative petroleum potential map of Nevada**: Garside and Hess (2011), plate 1:1,000,000 and text
OF11-6 **Oil and gas well information for Nevada – 2011 update**: Hess, Henson, David, Limerick, Siewe, and Niles; portable hard drive, 105 GB, 9643 files, $115; free on web at http://www.nbmg.unr.edu/Oil&Gas/NVWellInfo.html

Reports

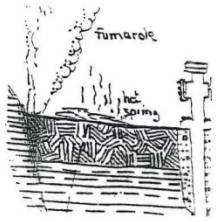
R51 **Preliminary assessment of the potential for carbon dioxide disposal by sequestration in geological settings in Nevada**: Price and others (2005), CD-ROM or paper copy, 35 pages, $15.00
R52 **Assessment of the potential for carbon dioxide sequestration by reactions with rocks in Nevada**: Sturmer, LaPointe, Price, and Hess (2007) $22.00 paper

USGS

Assessment of undiscovered oil and gas resources of the Eastern Great Basin Province, 2005, Fact Sheet **FS-2005-3053, free at http://pubs.usgs.gov/fs/2005/3053/**
Basin and Range Carbonate Aquifer System Study:
http://nevada.usgs.gov/barcass/data.htm

Ordering information for Nevada Bureau of Mines and Geology
Sales office located at Great Basin Science Sample and Records Library, 2175 Raggio Parkway, Reno, NV 89512
Phone: (775) 682-8766 Fax: (775) 784-6690 Web: http://www.nbmg.unr.edu

Geothermal resources in Nevada



Geothermal information page on the NBMG website
http://www.nbmg.unr.edu/Geothermal/index.html

The following publications on geothermal resources are available from the Nevada Bureau of Mines and Geology. NBMG items that are underlined are available ***free on the Internet*** and can be viewed at http://www.nbmg.unr.edu/.

Bulletins

B65 Mineral and water resources of Nevada: Cornwall (1964) pp. 267-269, $7.00
B89 Geology and mineral deposits of Pershing County, Nevada: Johnson (1977) pp. 104-106, $21.00
B91 Thermal waters of Nevada: Garside and Schilling (1979) $22.00, *for update see L-5*
B97 Discovery and geology of the Desert Peak geothermal field—a case history: Benoit, Hiner, and Forest (1982), $15.00 *(see also OF03-27)*
B99B Mineral resources of northern Nye County, Nevada: Kleinhampl and Ziony (1984) pp. 37-38, $19.00

Educational Series

E-7 Geothermal resources in Nevada: Student reading/activity book for grades four through eight, 27 pp., $4.05
E-15 Nevada geothermal electric power production, brochure (1992) 2 pp., $0.60
E-35 Major mines, oil fields, and geothermal plants in Nevada
E-46 Taking the pulse of the Earth
E-51 Life's a beach: In search of ancient shorelines and volcanoes in the Grimes Point and Lahontan Mountains area

Lists

L-5 Index to geothermal well files housed at NBMG: Davis and Hess (2009) *updates* App. 2 of B91, $19.50

Maps

M126 Nevada geothermal resources: Shevenell, Garside, and Hess (2000), *superseded by M161*
M141 Nevada geothermal resources (second edition): Shevenell and Garside (2005), 1:750,000, $16.00 for paper copy, *available folded or rolled, superseded by M161*
M146 Geologic map of the Fraser Flat quadrangle and the west half of the Moses Rock quadrangle, Washoe Co., NV
M151 Geothermal potential map of the Great Basin, western United States: Coolbaugh and others (2005), 1:1,000,000, $30.00, *rolled only*
M161 Nevada geothermal resources: Penfield, Shevenell, Garside, and Zehner (2010), 1:750,000, $18.00, *folded or rolled, supersedes M126 and M141*

Mineral Industry Series

MI-1979 through current year—The Nevada mineral industry is published annually and has a section on geothermal activities, varies with year, MI-1994-current year available free on Internet at http://www.nbmg.unr.edu/ and click on "Online Documents."

Newsletters

Nevada Geology Newsletter no. 19, page 3 (Summer 1993) "Low-temperature geothermal resources in Nevada" by Larry Garside, free

Open-File Reports

OF83-6 Preliminary map of thermal wells in the Moana geothermal area, Reno, Nevada: Garside, $8.00
OF87-2 Mineral resource inventory – U.S. Navy master land withdrawal area, Churchill County, Nevada: Quade and Tingley, $92.00
OF94-2 Nevada low-temperature geothermal resource assessment: 1994: Garside, with a bibliography by Davis and Garside, $40.00 for text and plate, or $20.00 for text on disk, or $7.00 for plate only
OF96-2-9 Reconnaissance photogeologic map of young (Quaternary and late Tertiary) faults in Nevada: (Plate 9) 1:1,000,000, map and text, $15.00
OF03-27 Preliminary geologic map of the Desert Peak-Brady geothermal fields, Churchill County, Nevada: Faulds and Garside (2003), $15.00 *(see also B97)*
OF06-5 Mineral- and energy resource potential for White Pine County, Nevada
OF06-6 Mineral- and energy resource potential for Pershing County, Nevada
OF06-7 Mineral- and energy resource potential for Lyon County, Nevada
OF06-12 Potential resources associated with proposed roadless areas in Nevada
OF09-10 Preliminary geothermal potential and exploration activity in Nevada: Zehner, Coolbaugh, and Shevenell, 1:1,000,000-scale plate and text, $20.00 (supersedes OF09-1)
OF10-6 Preliminary geologic map of the Lee-Allen geothermal area, Churchill County, Nevada
OF11-3 Preliminary geologic map of the Reese River geothermal area, Lander County, Nevada
OF11-10 Descriptive logs, skeletonized samples, and photographs of core from Presco Energy's thermal gradient wells P3-1, P 10-1, and P 32-2 in the Rye Patch area, Pershing County, Nevada: Davis (2011, Web version only)

OF11-11 Preliminary geologic map of the northern Lake Range, San Emidio geothermal area, Washoe County, Nevada: Rhodes, Faulds, and Ramelli, scale 1:24,000, $18.00
OF12-3 Data tables and graphs of geothermal power production in Nevada: Shevenell, Price, and Hess (1985-2011, Web version only)

Reports

R21 Geothermal exploration and development in Nevada through 1973
R25 Evaluation of geothermal activity in the Truckee Meadows, Washoe County, Nevada: Bateman and Scheibach (1975), $4.00
R33 Papers on mineral deposits of western North America: (1979), presented at the Fifth Quadrennial Symposium of IAGOD, $10.00
R41 Precious-metal mineralization in hot springs systems, NV-CA: Tingley and Bonham (1986), $15.00
R43 Mineral resources of the Kumiva Peak 30' by 60' Quadrangle: Tingley (1989) pp. 16-17, $5.00
R44 Mineral resources of the Pahranagat Range 30' by 60' Quadrangle: Tingley (1989) pp. 8-9, $5.00
R45 Mineral resources of the Overton 30' by 60' Quadrangle: Tingley (1989) pp. 12-13, $5.00
R46 Mineral resources of the Timpahute Range 30' by 60' Quadrangle: Tingley (1991) pp. 30-31, $5.00
R51 Preliminary assessment of the potential for carbon dioxide disposal by sequestration in geological settings in Nevada

Special Publications

SP4 Geology of Nevada: a discussion to accompany the Geol. map of Nevada (see below): Stewart (1980), $25.00
00001 Geologic map of Nevada: Stewart and Carlson, U.S.G.S. (1978) 1:500,000, *available rolled only,* $20.00 *available free on the Internet at <http://keck.library.unr.edu/> and click on "Great Basin geoscience dataset" or at <http://www.nbmg.unr.edu/dox/dox.htm>, see SP4 for descriptive text*

Urban Map Series

3Ah Energy and mineral resources map of the Las Vegas SE Quadrangle: Papke and Bell (1973) *available rolled or folded*, $2.00
4Ah Energy and mineral resources map of the Reno Quadrangle: Bingler, Bonham, and Luza (1973) *available rolled or folded*, $2.00
5Ah Energy and mineral resources map of the Washoe City Quadrangle: Papke and Jones (1978) *available rolled or folded*, $2.00

Nevada Petroleum Society

NPS5 Geology of White River Valley, the Grant Range, Eastern Railroad Valley and Western Egan Range, Nevada
NPS18 Oil, gas and geothermal occurrences in northwestern Nevada
NPS22 Geology, Geothermal Resources and Petroleum Exploration of Neogene Basins in the Reno, Nevada Area

USGS Publications

C1249 Geothermal energy – clean power from the earth's heat: Duffield and Sass, *free on the Internet at <http://geopubs.wr.usgs.gov/circular/c1249/>*
I-1701 Bouguer gravity anomalies, depth to bedrock, and shallow temperature in the Humboldt House geothermal area, Pershing County, Nevada: Schaefer (1986), $9.00
OF74-271 Geothermal systems of northern Nevada: Hose and Taylor (1974), 30 pages, call for prices
OF74-1066 The chemical composition and estimated minimum thermal reservoir temperatures of the principal hot springs of northern and central Nevada, call for prices
OF81-918 Geothermal resources of the western arm of the Black Rock Desert, northwestern Nevada, part I, geology and geophysics: Schaefer, Welch, and Maurer (1983), 41 pages and 4 plates, call for prices
OF02-374 A helicopter-borne magnetic survey over Dixie Valley geothermal field, Nevada: A web site for distribution: Pearson, deRidder and Johnson (2002), *available free on the Internet at <http://pubs.usgs.gov/of/2002/ofr-02-0374>,* call for prices
OF02-384 High-resolution aeromagnetic survey to image shallow faults, Dixie Valley geothermal field, Nevada: Grauch (2002), *<http://pubs.usgs.gov/of/2002/ofr-02-0384>, call for prices*

Other Resources

Great Basin Center for Geothermal Energy is at http://www.unr.edu/geothermal/.

For more information, please contact:

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
E-mail: nbmg@unr.edu
www.nbmg.unr.edu

Nevada Petroleum and Geothermal Society Calendar: Year 2013-2014	
Nov 7, 2013	**NPGS Monthly Dinner Meeting** – Thursday Nov 7, 6:30 PM Ramada Reno Hotel, 1000 E 6th St, Reno, NV *Speaker: Mark Coolbaugh, Geologist, Reno NV* *Topic: Blind Geothermal Systems*
Nov 19, 2013	**Nevada BLM Geothermal Lease Sale, Reno, NV** http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/geothermal0/ggeothermal_leasing.html
Dec 2-6, 2013	**Northwest Mining Association 119th Annual Meeting** John Ascuaga's Nugget, Reno/Sparks, NV **www.nwma.org**
Dec 6, 2013 Friday	**NPGS Annual Christmas Party** – Friday Dec 6, 2013 6:30 PM Ramada Reno Hotel, 1000 E 6th St, Reno, NV *Details TBA*
Dec 10, 2013	**Nevada BLM Oil & Gas Lease Sale, Reno NV** **Ely District, posting date: Sep 11, 2013** http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil___gas/oil_and_gas_leasing.html
Dec 11-13, 2013	**NAPE Rockies – NAPE Expo** **Denver Convention Center, Denver, CO www.napeexpo.com**
Jan 9, 2014 NOTE: DATE	**NPGS Monthly Dinner Meeting** – Thursday Jan 9, 6:30 PM Ramada Reno Hotel, 1000 E 6th St, Reno, NV *Speaker: Nicholas Hinz, Research Geologist, NBMG, Reno NV* *Topic: Hawthorne/Lee-Allen and Wabuska*
Feb 6, 2014	**NPGS Monthly Dinner Meeting** – Thursday Feb 6, 6:30 PM Ramada Reno Hotel, 1000 E 6th St, Reno, NV *Speakers: Lowell Price, NDOM, Carson City NV and John Menghini, BLM, Reno NV* *Topic: NDOM/BLM Updates, Oil, Gas and Geothermal Activity in Nevada*
Mar 6, 2014	**NPGS Monthly Dinner Meeting** – Thursday Mar 6, 6:30 PM Ramada Reno Hotel, 1000 E 6th St, Reno, NV *Speaker: Patrick Walsh, Ormat Nevada, Reno NV* *Topic: Steamboat Geothermal Complex*
Apr 3, 2014	**NPGS Monthly Dinner Meeting** – Thursday Apr 3, 6:30 PM Ramada Reno Hotel, 1000 E 6th St, Reno, NV *Speaker: James Faulds, Director/State Geologist, NBMG, Reno NV* *Topic: Hot Springs Mountain*
Apr 6-9, 2014	**AAPG Annual Convention & Exhibition – Houston, TX** **George R Brown Convention Center. Submit abstracts by Sep 19.** **www.aapg.org**
May 1, 2014	**NPGS Monthly Dinner Meeting** – Thursday May 1, 6:30 PM Ramada Reno Hotel, 1000 E 6th St, Reno, NV *Speaker: Rick Stucker, Senior Geologist, Noble Energy, Denver CO* *Topic: Hydraulic Fracturing Project, Nevada*
2016	**Rocky Mountain Section/Pacific Section Meeting – AAPG 2016** 2016 joint RMS-AAPG/PS-AAPG annual meeting, Las Vegas, Nevada

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 .