

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/

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Dinner Meeting: Thursday, Jan 9, 2014

Speaker: Nicholas Hinz

Research Geologist, NBMG, UNR, Reno, NV

Topic: STRUCTURAL CONTROLS OF SEVERAL

GEOTHERMAL SYSTEMS ASSOCIATED WITH THE

CENTRAL WALKER LANE ...

Place: Ramada Reno Hotel

1000 East 6th Street, Reno, Nevada

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



Buffet Style Dinner Served at 7:00 PM Dinner Costs:

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

RSVP at the following link to make reservations for the January 9th Dinner Presentation:

https://docs.google.com/forms/d/1fQHuPN1fCnV2Z7s_b6OdL6gW5kdav8xa3jYbYqbVx5k/viewform

SEE CALENDAR Page 16 for upcoming meetings

► NPGS Monthly Dinner Meeting – Jan 9, 2014

NEVADA PETROLEUM AND GEOTHERMAL SOCIETY THURSDAY, January 9th DINNER MEETING

STRUCTURAL CONTROLS OF SEVERAL GEOTHERMAL SYSTEMS ASSOCIATED WITH THE CENTRAL WALKER LANE INCLUDING THREE BLIND GEOTHERMAL SYSTEMS AT HAWTHORNE PLUS LEE-ALLEN AND WABUSKA

Temperature and geochemistry data indicate the presence of three blind geothermal systems in the Hawthorne area. One system is associated with a major stepover in the Wassuk Range front. A second system resides along the northwest margin of the Garfield Hills at a probable fault intersection. The third system resides in the middle of the southern part of Walker Lake basin about 7 km north-northeast of the city of Hawthorne where tufa mounds form a linear outcrop along part of the Hawthorne fault zone and the northwest corner of a possible pull-apart.

The Lee-Allen geothermal area sits in a small pull-apart, in a northwest-striking dextral shear zone. The geothermal reservoir is hosted in shallow basement rocks, and fluid flow is controlled by the northeast-striking normal faults with greatest documented displacement. The distribution of spring deposits along this normal fault indicate that fluid flow is also concentrated along intersections with the northwest-striking dextral faults.

The Wabuska geothermal area is positioned near the western end of one of the major strands of the Wabuska fault zone. The reservoir may be associated with a displacement transfer zone as strain is transferred from strike-slip motion along the Wabuska fault zone to normal faults concealed in Mason Valley. Alternatively, reservoir permeability may be associated with one or more concealed fault intersections whereby the strand of the Wabuska fault zone cuts across older northwest-striking faults concealed in the basin near where the hot springs emerge.

► About the Speaker: Nicholas Hinz

Nicholas H. Hinz, Research Geologist, Nevada Bureau of Mines and Geology, UNR

Nick has worked at NBMG since 2007 where his research has focused on regional studies of Basin and Range extensional tectonics and of dextral shear associated with the Walker Lane using detailed geologic mapping, structural analyses of faults and folds, geochronology, and paleomagnetic analyses. Much of his research has also focused on studying geothermal systems associated with extensional tectonics with the purpose of defining structural and stratigraphic controls of reservoirs, regional patterns in resources across the Great Basin region, and helping advance exploration strategies. These projects have involved systemic regional assessments, geologic mapping, integrating drill-hole and geophysical data sets, structural analyses, and constructing digital 2D and 3D geologic models.

Nick earned his B.A. at Whitman College and his M.S. at UNR. He has also working in the geologic consulting industry for 5 years prior to his current position at NBMG.

▶ WELCOME NEW NPGS MEMBERS:

Hinz, Nicholas Nevada Bureau of Mines & Geology, UNR Reno, NV McGraw, Michael Rain for Reno Sparks, NV

► <u>New NPGS Publication Listing:</u>

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!!

► Nevada BLM Geothermal Lease Sale; Dec 10, 2013 – Results:

For a complete listing of the results from this sale, use the following link: http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/geothermal0/ggeothermal_leasing.html

There were 178 parcels offered at the sale. Fifty four parcels received bids. The high bid per acre was \$54 for parcel # 154 by Contex Energy (Denver). The high bid per parcel was \$135,044 for parcel #144 by Housing Int., LLC (Belvedere, CA). Several parcels received high bids, above \$10/acre. Other buyers at the sale were, Hawkwood Energy (CO), Great Basin Oil (NV), White Wolf Land Service (CA), Kirkwood Oil & Gas (WY), Roy Barton (NM), David Dibiase (CA).

► <u>Upcoming Nevada BLM Geothermal Lease Sale; Sep 9, 2014:</u>

Nominations for this sale must be received by Jan 31, 2014.

http://www.blm.gov/pgdata/etc/medialib/blm/nv/minerals/geothermal/leasesales.Par.56657.File. dat/20140909_Geo_Sale_Nominations.pdf

► <u>Scheduled BLM Oil & Gas Lease Sales: Parcel listings are available.</u>

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 24, 2014	Elko/Southern Nevada	June 13, 2013	March 21, 2014	April 20, 2014
July 17, 2014	Battle Mountain	September 13, 2013	April 14, 2014	May 16, 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

NOTE: This is a revised schedule. For a listing of parcels for the June & July sale, use the following link:

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

► AAPG Rocky Mountain Section Annual Meeting:

July 20-22, 2014 – Denver Convention Center, Denver CO Call for Papers included in this newsletter – Deadline Jan 31, 2014. www.aapgrms.org

► IMPORTANT Sage Grouse Planning Strategy for Nevada:

https://www.blm.gov/epl-front-

<u>office/eplanning/planAndProjectSite.do?methodName=renderDefaultPlanOrProjectSite&projectId=21152&dctmld=0b0003e8801f44ed</u>

The Nevada and Northeastern California Greater Sage-Grouse Draft EIS is available for review and comment. The comment period will be open from Friday November 1, 2013 through Wednesday January 29, 2014. Use the link above to access the documents; submit comments, and access maps and additional information.

► News from Nevada Bureau of Mines & Geology: From: Charlotte Stock

New GSA Fellow—Jim Faulds

Congratulations to Jim Faulds, NBMG Director and State Geologist, for being elected as Fellow to the Geological Society of America.

http://www.geosociety.org/members/newFellows.htm

From GSA website: Faulds was recognized for fundamental work on the tectonics and structural geology of the Basin and Range province. An accomplished mapper, Faulds has integrated detailed geologic mapping into nearly all his work, which has had direct applications to earthquake hazards, industrial minerals, metallic ore deposits, and geothermal resources (from Jon Price).

Congressional Briefings—Jon Price

Jon Price briefs Congress on critical minerals: http://www.smenet.org/enews/

From Society of Mining Engineers website: On December 13, [2013], SME sponsored and participated in a series of congressional briefings in the House and Senate in Washington, D.C. titled, "Critical Minerals: Ensuring America's Future." Jon Price, SME [Society of Mining Engineers] board member and emeritus state geologist for the Nevada Bureau of Mines and Geology, spoke, along with representatives from the U.S. Geological Survey, American Geosciences Institute (AGI) and the Defense Logistics Agency, on the role that rare earths and other critical and strategic minerals play in daily life, job creation and national security.

If you are planning to visit our office at <u>GBSSRL</u>, you can view a sample of the rare earth mineral bastnäsite from the Mountain Pass mine (courtesy of Steve Castor).

National Radon Action Month—January 2014

January is National Radon Action Month. Please click on links below to find out how you can *protect your family* from the second leading cause of lung cancer in the United States. Free short-term testing kits are available through February 2014 from your Cooperative Extension Office.

University of Nevada Cooperative Extension Nevada Radon Education Program:

http://www.unce.unr.edu/radon/ or http://www.RadonNV.com

For Kids - Radon Activity Book: http://www.unce.unr.edu/programs/sites/radon/files/pdf/NVRadonActivityBook.pdf

Nevada Bureau of Mines and Geology: http://www.nbmg.unr.edu/Geohazards/Radon.html

Radon in Nevada (B108): http://www.nbmg.unr.edu/dox/b108.pdf http://www.nbmg.unr.edu/sales/pbsdtls.php?sku=B108

Nevada Petroleum and Geothermal Society; Jan 2014

Radon in Nevada – A natural hazard (E18): http://www.nbmg.unr.edu/dox/e18.pdf Reducing radon in Nevada homes (E21): http://www.nbmg.unr.edu/dox/e21.pdf Geographical Information System (GIS) analysis of radon data (SP17): http://www.nbmg.unr.edu/sales/pbsdtls.php?sku=SP17

Environmental Protection Agency: http://www.epa.gov/radon/

A Citizen's Guide to Radon: http://www.epa.gov/radon/pdfs/citizensguide.pdf

http://www.epa.gov/radon/pubs/citguide.html

U.S. Geological Survey: http://www.usgs.gov

The Geology of Radon: http://energy.cr.usgs.gov/radon/georadon.html

EarthCache Birthday Celebration – Friday January 10 EarthCache turns 10!

From the EarthCache website: Let's celebrate by meeting at the Chewrocca EarthCache, GC4PY65, at 12:00 (Noon) to sign the event log. Then we will head over to 2175 Raggio-Parkway at the Bureau of Mines [and Geology] building where there are some great resources for learning about geology and EarthCaching in the great state of Nevada!

The first EarthCache, GCHFT2, was placed on January 10th, 2004 in Australia. There are now over 16,600 active EarthCaches worldwide and 85 of those are in Nevada. Let's share our favorite EarthCache adventures. The event raffle prize will be a beautiful 2014 Nevada Geology Calendar which will also be available at the Nevada Bureau of Mines [and Geology].

EarthCache event in Reno:

http://www.geocaching.com/geocache/GC4W82C_earthcache-birthday-event-reno-nvhttp://www.earthcache.org/

NBMG/UNR Job Announcement

ASSISTANT PROFESSOR Economic Geology

http://www.nbmg.unr.edu/ docs/Economic geology position announcement.pdf

The Nevada Bureau of Mines and Geology (NBMG) at the University of Nevada, Reno seeks applicants for a tenure-track faculty position focused on hydrothermal mineral deposits. NBMG is a research and public service unit of the University of Nevada, Reno (UNR) and the state geological survey. Managed as part of the Mackay School of Earth Sciences and Engineering in the College of Science at UNR, NBMG functions as an academic unit, and its principal scientists are tenure-track faculty members. Nevada is one of the most exciting regions in the world to do research in the geosciences and the best in the U.S. for the study of hydrothermal mineral deposits.

Interested applicants must have a doctorate in geology or a related geoscience field by the time of hire and a demonstrated record of research on topics related to hydrothermal mineral deposits as indicated by dissertation research or peer-reviewed publications. Excellent communication skills, as demonstrated in written application materials; commitment to public service; potential for, or established record of publications; and ability to attract funding are essential. Doctoral research must include one or more of the following disciplines: economic geology, structural geology, igneous petrology, and geochemistry.

Additional preferred qualifications include: 1) industrial or academic experience in hydrothermal minerals deposits, particularly in field-based studies in a variety of geological settings; 2) expertise in structural geology, geologic mapping, and active hydrothermal systems (geothermal activity); 3) research productivity with publications in the peer-reviewed literature; 4) achievable plans for funded research on Nevada-focused topics in economic geology and geothermal energy, as described in the applicant's letter of interest; and 5) both an understanding of and interest in contributing to the role of a state geological survey on issues related to mineral deposits and other resources, beyond basic scientific research.

Position responsibilities and expectations include: 1) working independently as well as collaborating with NBMG faculty-staff, faculty in other geoscience units at UNR and UNLV, and others in industry and government in developing funded projects and conducting research; 2) contributing to the development of datasets and reports on Nevada's mineral and energy resources, including resource assessments; 3) communicating effectively with the public and community leaders regarding the geology of Nevada and its mineral and energy resources; 4) focusing research on mineral deposits in Nevada; and 5) supervising graduate students and teaching undergraduate and graduate classes.

Nevada Petroleum and Geothermal Society; Jan 2014

The position will be a tenure-track faculty appointment with an academic-year base salary that is competitive with other research universities. Starting date will be July 1, 2014 or shortly thereafter, depending on availability of the successful candidate.

To apply, please visit: https://www.unrsearch.com/postings/13967. Please complete the online application and upload a letter expressing your interest in the position and research plans; a complete vita; contact information (names, e-mail and postal addresses, and telephone numbers) for at least three references; and electronic copies of up to three of your publications. Additionally, applicants must submit examples of geologic mapping related to mineral deposits that they have conducted with their application materials. To ensure full consideration, all information must be submitted by March 24, 2014. For further information about NBMG, please consult our website (http://www.nbmg.unr.edu).

Equal Employment Opportunity/Affirmative Action. Women and underrepresented groups are encouraged to apply.

Idaho Geological Survey Job Announcement

The Idaho Geological Survey is hiring a new Director and State Geologist. Please see this link below for details: https://www.sites.uidaho.edu/AppTrack/Agency/Applicant/ViewAnnouncement.asp?announcement_no=10001056554

BLM Job Announcements

Message from BLM: We are pleased to announce a new, exciting position 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.

Job Description: Geographic Information System Specialist

Announcement Number: UT-DEU-2014-0004; Location(s) of position: Salt Lake City, UT, US;

Salary: \$57,408 - \$89,450;

Applications will be accepted until: 01/09/2014.

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

https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancy/Detail!execute.hms?orgId=3&inum=109019

Job Description: Student Trainee (Administration) Announcement Number: NV-PTHWYS-2014-0001; Location(s) of position: Battle Mountain, NV, US;

Salary: \$28,269 - \$36,746;

Applications will be accepted until: 01/21/2014.

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

https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancy/Detail!execute.hms?orgId=3&inum=109074

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"Like" our Facebook page https://www.facebook.com/pages/Nevada-Bureau-of-Mines-and-Geology/106397989390636 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

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



American Association of Petroleum Geologists

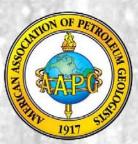
Rocky Mountain Section

Annual Meeting

Denver Convention Center, Denver, CO

July 20-22, 2014





CALL FOR PAPERSI

Earn recognition and maximize your visibility by submitting an abstract to the Rocky Mountain Section AAPG Annual Meeting: **CRACKING THE SOURCE**. The meeting will be held at the Colorado Convention Center in Denver, CO.

Abstracts will be accepted for posters and oral presentations from a wide variety of topics, with a focus on the Rocky Mountain region:

- Source Rocks and Petroleum Systems : Have we deciphered the codes?
- · Technology: Paradigm shifts
- Exploration/Exploitation: Looking back; Looking ahead
- Legendary Playmakers of the Rockies: A hotbed of notable people
- Structure and Tectonics : Nothing less than world-class
- Sedimentary Geology: Where the world comes to study
- Special Session for Students, Interns, and Young Professionals



Submit abstracts to:

www.aapgrms/2014/
conference/technical-program

Deadline January 31, 2014



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

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 Sponsors	ship Desired:		
(3) GOLD		\$500	
(4) SILVER		\$300	
(5) CORPORATE		\$	Indicate desired amount.
Indicate Where You would	d like to Designate your Sponsorship Dollars:		
	evada Mines and Geology Student Support		
B. NPGS General Support			
Total Amount Designated	will Add up to Total Amount Sponsored	\$	

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 (1) (2) develop leadership skills by participating and volunteering in NPGS functions.

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.

(3) GOLD Level Sponsorship costs \$500 for the 2013-2014 year.

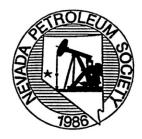
As a SILVER Level Sponsor, your Company's business card and/or logo will be displayed on a portion of our monthly newsletter and on our website. We will advertise opening positions with your Company at any time during the year. SILVER Level Sponsorship costs \$300 for the 2013-

(4) 2014 year.

CORPORATE Level Sponsors can provide the NPGS with any amount of their choosing. Amounts exceeding \$500 will be given the same benefits as (5) 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	on			
Work Address	Street	City	State	Zip Code
Residence Addres		City	State	Zip code
residence redict	Street	City	State	Zip Code
Preferred Mailing	Address? WOR	〈 -or-	RESIDENCE	
Work Phone	Residence I	Phone	Fax	
Mobile Phone		Email		
Member of AAPG	? YES -or-	□ NO		
Professional Refe	rences – list two references with	h phone numbers and	d addresses	
1) Name			Phone	
Address	Street	City	State	Zip Code
2) Name				
Address				
	Street	City	State	Zip Code
Education – list col	lleges and universities attended,	degree(s) received,	and date of degree(s) ((OPTIONAL)
Membership Type	!	Signature		
ACTIVE	\$20. [∞] /year	Date		
ASSOCIATE STUDENT	\$15. - /year \$10. [∞] /year			
LIFE	\$200. [∞] (one-time payment)		OO NOT COMPLETE	
Please make chec	ck payable to:	For NPS Memb	ership Committee Sign	atures Only
Nevada Petroleu				
P.O. Box 1	1526			
Reno, NV 895	10-1320			

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.

Nevada Petr	Nevada Petroleum and Geothermal Society; Jan 2014		
	CD-	Download	
Paper	ROM	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/

Oil and gas resources from NBMG

The following publications are available from the Nevada Bureau of Mines and Geology. NBMG publications that are <u>underlined</u> 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

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

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/

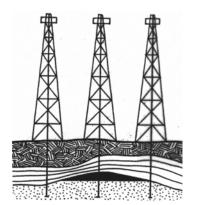
Basin and Range Carbonate Aquifer System Study:

http://nevada.usgs.gov/barcass/data.htm

Ordering information for Nevada Bureau of Mines and Geology

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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 <u>underlined</u> 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

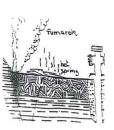
MI-1979 through current year—The Nevada mineral industry is published annually and has a section on geothermal activities, varies with year, MI-1994-current year available free on Internet at http://www.nbmg.unr.edu/ and click on "Online Documents."

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
- One 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

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Other Resources

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

For more information, please contact:

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Nevada Petrolo	eum and Geothermal Society Calendar: Year 2013-2014
Jan 9, 2014	NPGS Monthly Dinner Meeting - Thursday Jan 9, 6:30 PM
NOTE: DATE	Ramada Reno Hotel, 1000 E 6 th St, Reno, NV
	Speaker: Nicholas Hinz, Research Geologist, NBMG, Reno NV
	Topic: Central Walker Lane
Feb 6, 2014	NPGS Monthly Dinner Meeting – Thursday Feb 6, 6:30 PM
	Ramada Reno Hotel, 1000 E 6 th 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 6 th 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 6 th 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 6 th St, Reno, NV
	Speaker: Rick Stucker, Senior Geologist, Noble Energy, Denver CO
	Topic: Hydraulic Fracturing Project, Nevada
Jun 24, 2014 Nevada BLM Oil & Gas Lease Sale, Reno NV	
	Elko, Southern NV District, posting date: Mar 21, 2014
	http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oilgas/oil_
	and gas leasing.html
Jul 17, 2014	Nevada BLM Oil & Gas Lease Sale, Reno NV
	Battle Mtn District, posting date: Apr 14, 2014
	http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oilgas/oil_
	and gas leasing.html
Jul 20-22,	AAPG Rocky Mountain Section Annual Meeting
2014	Denver Convention Center, Denver, CO
	CALL FOR PAPERS - www.aapgrms.org
Sep 9, 2014	Nevada BLM Geothermal Lease Sale, Reno NV
	Nominations must be received by Jan 31, 2014
	http://www.blm.gov/pgdata/etc/medialib/blm/nv/minerals/geothermal/leases
	ales.Par.56657.File.dat/20140909 Geo Sale Nominations.pdf
2016	Rocky Mountain Section/Pacific Section Meeting – AAPG 2016
	2016 joint RMS-AAPG/PS-AAPG annual meeting, Las Vegas, Nevada
	2010 Joint Rivis-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.