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RMS-AAPG Representative Jerry Walker Geologist 1455 Shewmaker Ct. Reno, NV 89509 775-348-0650 jerry_reno@charter.net

NEWSLETTER

Serving the Petroleum and Geothermal Community

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

Dinner Meeting: Thursday, May 1 2014

Speaker:

Topic:

- aker: Rick Stucker, Sr. Geologist Rockies/Frontier Business Unit, Noble Energy, Inc.
 - Overview of Noble Energy's Current Drilling Program in Nevada
- Place:

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

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

HOSTED BY:



Dinner Served at 7:00 PM

Dinner Costs: NPGS Members \$ 20; Non-Members \$23; Students \$10

RSVP with the following link to make reservations for the May 1st dinner Presentation.

https://docs.google.com/forms/d/1nu8k2_mBTzBsd1kpeMOi WeyEDhi7IPErMopeEY1Tjl4/viewform

Keep in mind that NPGS is charged for every meal that is reserved.

SEE CALENDAR Page 15 for upcoming meetings

▶ <u>NPGS Monthly Dinner Meeting – May 1, 2014</u>

NEVADA PETROLEUM AND GEOTHERMAL SOCIETY THURSDAY, May 1 DINNER MEETING

Overview of Noble Energy's Current Drilling Program in Nevada

Rick Stucker, Sr. Geologist, Rockies/Frontier Business Unit, Noble Energy, Inc.

Noble Energy, Inc. is a Houston-based E&P company. Founded by Lloyd Noble in 1932 in Ardmore, Oklahoma, and originally known as Samedan Oil Corporation, Noble Energy was one of the first independent operators to explore the Gulf of Mexico. Today, the company has five core areas in various regions of the world, with reserves of 1.4 billion barrels of oil equivalent at year-end 2013. The five core operations areas are the DJ Basin and the Marcellus Shale onshore in the U.S, deepwater Gulf of Mexico, offshore Eastern Mediterranean, and offshore West Africa.

Noble Energy's corporate purpose is "Energizing the World, Bettering People's Lives." We strive to provide energy for the world by finding and producing oil and natural gas, while positively influencing the lives of our stakeholders. Along with technical excellence and financial discipline, we endeavor to demonstrate leadership in environment, health, safety, compliance and stewardship.

After drilling two Devonian tests in Eureka and White Pine counties in 2003, Noble Energy has returned to Nevada to pursue a Tertiary age oil play in Elko County. Two exploratory wells were drilled in late 2013. Formation evaluation included robust logging suites, collection of a multitude of rotary side wall cores, whole core and extensive geochemical analysis. The first well has been completed and production testing should commence in May. The completion design for the second well is in process. A second exploratory phase drilling program is expected to commence Q3 2014.

►<u>About the Speaker:</u>

Rick Stucker, Sr. Geologist, Rockies/Frontier Business Unit, Noble Energy, Inc.

Rick has been with Noble Energy since 2005. He worked waterflood development and close-in exploration projects in the Marietta Basin and Criner Hills Uplift in south central Oklahoma. After transferring to the Rockies Business Unit he worked Noble's Piceance Basin asset, drilling and completing tight gas sand wells in the Mesa Verde Group and initiating a horizontal drilling and spacing unit for Mancos-Niobrara development. Rick has been involved in the Nevada project since 2012. Industry experience prior to joining Noble includes working as a wellsite geologist on the Gulf Coast, as a processing geophysicist in the Williston Basin and Alaska, and as an exploration geologist in the DJ Basin.

Rick earned his bachelor's degree in geology at the University of Colorado and did post-graduate work at the Colorado School of Mines.

Cocktail Reception 6:30 Hosted by ThermaSource Cementing, Inc.:

ThermaSource Cementing, Inc.

Marc Brennen | Senior Director Business Development | ThermaSource, Inc. 7085 Eddy Road Area G, Arbuckle, CA 95912 cell: 916.801.3336|office: 530.476.3333|fax: 530.476.3347 mbrennen@thermasource.com | www.ThermaSource.com

▶ <u>NEW NPGS Officers 2014-2015 (Jun 1-May31):</u>

President	Judy Kerack, Engineer, Lumos & Associates
Vice President/President-Elect	John Snow, Chief Operating Officer, Standard Steam
Secretary	Jerry Walker, Geologist
Treasurer	Steve Foster, Geophysicist/Geologist
Past-President	Bill Ehni, Geologist, Ehni Enterprises, Inc.

<u>2014 NPGS Graduate Student Research Awards:</u>

Five thousand three hundred and fifty dollars in grants, were made to eight student applicants.

- 1) Michael Evans (M.S. candidate at the University of Nevada, Las Vegas), \$1,000 Structural development and tectonic role of the Arrowhead Mine Fault, Pahranagat Shear Zone, Nevada
- 2) Shaimaa Abdelhaleem (M.S. candidate at the University of Nevada, Las Vegas), \$1,000 *Kinematics and timing of the eastern part of Las Vegas Valley Shear Zone, Nellis Dunes area, Nevada*
- 3) Chad Carlson (Ph.D. candidate at the University of Nevada, Reno), **\$750** *Strain transfer at the northern termination of the central Walker Lane, Terrill Mountains, western Nevada*
- 4) Holly McLachlan (Ph.D. candidate at the University of Nevada, Reno), **\$750** Determining the subsurface stratigraphy and modeling first order structural controls on basin floor topography and fluid flow in the Carson Sink Basin, northwestern Nevada
- 5) **Sarah Evans** (Ph.D. candidate at the University of Nevada, Las Vegas), **\$500** *Sedimentology and geochronology of late Eocene to early Oligocene conglomerates, east-central Nevada and west-central Utah*
- 6) Nicholas Paasche (M.S. candidate at the University of Nevada, Reno), \$500 A sensitivity analysis of parameters controlling heat flow in a geothermal reservoir
- 7) **Stephen Angster** (Ph.D. candidate at the University of Nevada, Reno), **\$500** *The big step: a neotectonic link between Cascadia and the Walker Lane*
- 8) Andrew Sadowski (M.S. candidate at the University of Nevada, Reno), \$350 Structural controls of the Black Warrior geothermal system, Truckee Range, Washoe County, Nevada

Congratulations to all the students. Thanks to Jim Trexler, Chair of the Scholarship Committee this year, for organizing this important annual event. Thanks also to Bill Ehni, Alan Wallace, and Jerry Walker for their work on the Committee this year. Finally, special recognition is in order for the members who contribute to the NPGS Scholarship program during the membership renewal, enabling the NPGS to distribute additional funding to these students.

Scheduled Nevada BLM Geothermal Lease Sales:

Note date change

Sale Date	Nominations Due	Sale Posting Date	Protest Deadline
September 10, 2014	January 31, 2014	June 12, 2014	July 14, 2014
September 16, 2015	February 6, 2015	June 18, 2015	July 17, 2015

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

Scheduled Nevada BLM Oil & Gas Lease Sales:

NOTE RECENT CHANGES

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
July 17, 2014	Battle Mountain	September 13, 2013	April 14, 2014	May 16, 2014
September 9, 2014	Elko/Southern Nevada	June 13, 2013	March 21, 2014	April 20, 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
March 10, 2015	Elko/Southern Nevada	June 12, 2014	December 10, 2014	January 9, 2015
June 9, 2015	Battle Mountain	September 12, 2014	March 11, 2015	April 10, 2015
September 15, 2015	Winnemucca/Carson City	December 19, 2014	June 17, 2015	July 17, 2015
December 8, 2015	Ely	March 13, 2015	September 9, 2015	October 9, 2015

*EOI = Expression of Interest

NOTE: The June 24 Sale has been postponed until Sep 9, 2014. There will be two Oil & Gas Lease Sales that day.

For listings of parcels for the Jul & Sep sales, use the following link:

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

► <u>AAPG Rocky Mountain Section Annual Meeting:</u>

July 20-22, 2014 – Denver Convention Center, Denver CO

Earlybird registration begins April 2014. Flyer in this newsletter.

www.aapgrms.org/2014

► <u>News from Nevada Bureau of Mines & Geology:</u> From: Charlotte Stock

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

Stay Informed about NBMG

Subscribe to our email list by sending an email to webmaster@nbmg.unr.edu with "subscribe to Publications mailing list" in the subject line

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

"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 <u>http://www.nbmg.unr.edu/Departments/PubSales/PubSales.html</u>

>Calendar Contest Deadline – now June 30, 2014

Do you have an amazing photo of Nevada geology that you would like to see in the next 2015 Nevada Geology Calendar? Entries are still being accepted for this photo contest! The deadline has been extended to June 30, 2014.

Here is information about the current published 2014 calendar: http://www.nbmg.unr.edu/sales/pbsdtls.php?sku=CAL2014

Here are the details for the 2015 calendar contest:

• Deadline for entries is now June 30, 2014.

• Photos need to be taken in Nevada. A location description and/or GPS coordinates should accompany submissions along with description.

- High-quality, high-resolution photo files of at least 300 dpi are required for quality printing.
- You may enter as many photos as you wish.
- E-mail submissions to Jack Hursh (jhursh@unr.edu).
- NBMG Cartographers will make the final decision on the winning photos.

•Prizes will be awarded for first-, second-, and third-place winners. http://www.nbmg.unr.edu/_docs/2015_Calendar_photo_contest.pdf

>BLM Job Announcement

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.

Position Information:

Job Description: Student Trainee (Petroleum Engineering); Announcement Number: MT-PTHWYS-2014-0002; Location(s) of position: Great Falls, MT, US, Miles City, MT, US, Dickinson, ND, US; Salary: \$12.07 - \$17.61; Applications will be accepted until: 04/30/2014.

For additional information on this job posting, please go to: https://jobs.mgsapps.monster.com/blm/vacancy/viewVacancyDetail!execute.hms?orgId=3&jnum=109706

>GSN Field Trip – May 2-4, 2014

GSN SPRING 2014 FIELD TRIP - May 2-4, 2014 Humboldt Range, Majuba Hill, and Trinity Range (Au, Ag, Cu, Sn, W, Be, Hg, Sb, B).

From GSN Newsletter, March 2014: Register now for the GSN's Spring Field Trip coming up on Friday May 2 to Sunday May 4, 2014! Jonathan Price, GSN V.P. and field trip leader has laid out a great itinerary for the 3-day trip. We will overnight in Lovelock, Nevada both nights. This trip will be a bit different as we will be riding in 4WD vehicles so we can visit places that a bus just can't get to. Bring your rock hammers and questions and join your fellow geologists on this one-of-a-kind adventure.

Contact Laura Ruud, GSN Office Manager, for more information: gsn@gsnv.org.

>GSN Symposium 2015; May 14–24, 2015 John Ascuaga's Nugget Hotel and Casino in Sparks, Nevada

"Even as much as the world has become available for exploration over the past decade, miners continue to return to Nevada. Why? Political stability, transparent regulatory environment, good infrastructure and GREAT GEOLOGICAL POTENTIAL. Miners return to focus on Nevada's geology and its important mineral deposit types: Carlin, epithermal and intrusion-related gold and silver, as well as other deposit types (porphyry Cu and Mo, IOCG and industrial materials) are also rising in importance."

A message from Laura Ruud, GSN Office Manager: The GSN 2015 Symposium Committee has been hard at work for months now organizing the next magnificent GSN Symposium to be held May 14-24, 2015! [Please see link below for] the first announcement flyer, and we encourage you to read and share with any colleagues you wish that may not be GSN members and who will want to participate. The Committee has already started lining up the field trip itineraries, speakers, exhibitors, posters, a core-shack, and a joint GSN-SEG Forum to be held on May 17, 2015 the day before the Symposium technical sessions begin.

Questions regarding the meeting can be directed to Molly Hunsaker, Symposium Chair, at <u>mollymhunsaker@2015gsnsymposium.org</u>. If you have questions about submitting an abstract, or an idea for a technical paper, the Technical Program Chairs are John Muntean and Moira Smith. Co-hosts for the GSN Symposium 2015 are Society of Economic Geologists, Nevada Bureau of Mines and Geology, and U.S. Geological Survey.

GSN Symposium 2015 flyer:

http://www.nbmg.unr.edu/_docs/GSN_2015_Symposium.pdf

>Department of Geological Sciences and Engineering—Seminar Dates

Below is the current University of Nevada, Reno DGSE seminar schedule for Spring 2014.

Spring 2014 Seminar Dates

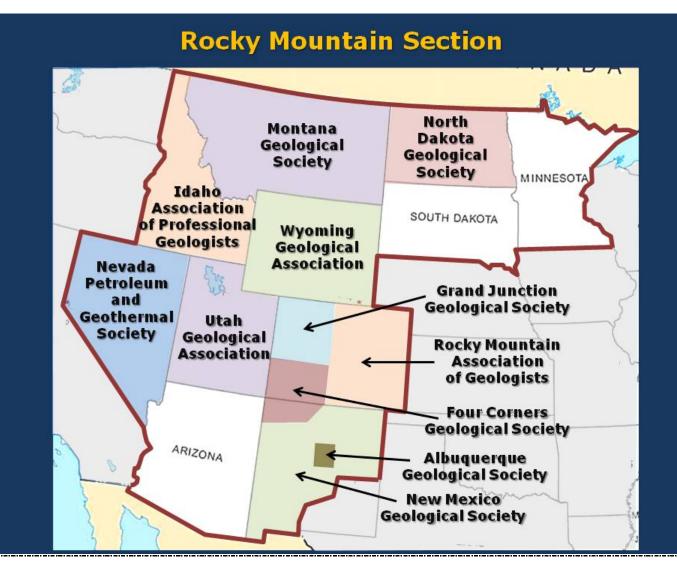
When: from 4 to 5pm Where: Davidson Mathematics and Science Center 105 (please note room change) http://www.unr.edu/around-campus/facilities/davidson

5/05/2014 John Wakabayashi

For more information, please contact:

Wendy Calvin Prof. Geophysics & Remote Sensing Director, Great Basin Center for Geothermal Energy Univ. Nevada – Reno, wcalvin@unr.edu, 775-784-1785

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



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Participation of the second se

Rocky Mountain Section—AAPG

Annual Meeting

July 20-22, 2014 in Denver, CO

at the Colorado Convention Center

Visit www.aapgrms.org/2014 to register!

SAVE \$100!

Early Bird Registration

ends June 1, 2014!

The RMS-AAPG Annual Meeting Highlights:

- Two, full days of technical presentations (oral and poster)
- Three short courses emphasizing unconventional science and technology
- Four field trips, one especially for YPs and students
- Two different core sessions (Williston, Powder, and DJ basins)
- Teacher's Program at Dinosaur Ridge
- All-Convention Luncheons
- Rocky Mountain Geo-Legends
 Theater
- A Night at the Denver Museum of Nature & Science
- Social and Networking Events



For more information, visit: www.aapgrms.org/2014

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Occupation/Title			
Company/Affiliation			
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Residence Address	City	State	Zip Code
Preferred Mailing Address? WORK	C -or-	RESIDENCE	
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Mobile Phone	Email		
Professional References – <i>list two references with</i> 1) Name Address	F		
	City	State	P
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Address	City	State	Zip Code
Education – list colleges and universities attended,	degree(s) received, ar	nd date of degree(s) (OPTIONAL)
<u>Membership Type</u> ☐ ACTIVE \$20. [∞] /year ☐ ASSOCIATE \$15. [∞] /year ☐ STUDENT \$10. [∞] /year			
LIFE \$200. ¹⁰ (one-time payment)		NOT COMPLETE	atures Only
Please make check payable to: Nevada Petroleum Society P.O. Box 11526 Reno, NV 89510-1526			

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 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 Co, 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/

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 <u>http://www.nbmg.unr.edu/</u>.

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

Bulletins

B104Oil 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)
- OF86-13Nevada petroleum production statistics, 1954-1986: Hess, Loomis and Garside, 14 pages, \$5.00
- <u>OF92-5</u> 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

<u>OF01-7</u> 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

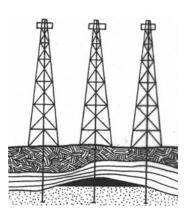
Reports

- <u>R51</u> 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
- <u>R52</u> Assessment of the potential for carbon dioxide sequestration by reactions with rocks in Nevada: Sturmer, LaPointe, Price, and Hess (2007) \$22.00 paper

USGS

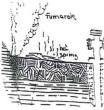
Assessment of undiscovered oil and gas resources of the Eastern Great Basin Province, 2005, Fact Sheet FS-2005-3053, free at <u>http://pubs.usgs.gov/fs/2005/3053/</u> Basin and Range Carbonate Aquifer System Study: <u>http://nevada.usgs.gov/barcass/data.htm</u>

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: <u>http://www.nbmg.unr.edu</u>



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
- <u>B97</u> 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

<u>L-5</u> 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
- <u>M141</u> Nevada geothermal resources (second edition): Shevenell and Garside (2005), 1:750,000, \$16.00 for paper copy, *available folded or rolled, superseded by M161*
- <u>M146</u> <u>M151</u> Geologic map of the Fraser Flat quadrangle and the west half of the Moses Rock quadrangle, Washoe Co., NV 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

- Preliminary map of thermal wells in the Moana geothermal area, Reno, Nevada: Garside, \$8.00 OF83-6 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 Preliminary geologic map of the Desert Peak-Brady geothermal fields, Churchill County, Nevada: OF03-27 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)

- <u>OF11-11</u> 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

- <u>C1249</u> 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:

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Nevada Petroleum and Geothermal Society Calendar: Year 2013-2014			
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: Overview of Noble Energy's Current Drilling Program in Nevada		
	This is the last monthly NPGS meeting until September		
May 2-4, 2014			
	Humboldt Range, Majuba Hill, and Trinity Range		
	Contact Laura Ruud gsn@gsnv.org		
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/oil_gas/oil		
	and gas leasing.html		
Jul 20-22,	AAPG Rocky Mountain Section Annual Meeting		
2014	Denver Convention Center, Denver, CO		
	Registration begins April 2014. www.aapgrms.org/2014		
Sep 9, 2014	Nevada BLM Oil & Gas Lease Sale, Reno NV		
	Elko, Southern NV District, posting date: Mar 21, 2014		
	Winnemucca/Carson City District, posting date: Jun 11, 2014		
	http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/oil_gas/oil		
	and gas leasing.html		
Sep 10, 2014	Nevada BLM Geothermal Lease Sale, Reno NV		
	Posting Date Jun 12, 2014		
	http://www.blm.gov/nv/st/en/prog/minerals/leasable_minerals/geothermal		
May 14-24,	GSN Symposium 2015		
2015	John Ascuaga's Nugget Hotel and Casino in Sparks, Nevada		
	http://www.nbmg.unr.edu/ docs/GSN 2015 Symposium.pdf		
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 <u>http://www.nbmg.unr.edu/nps/</u> To submit articles, corrections or suggestions for the newsletter; Contact Vicki Ehni 775-883-1107, cell 775-720-6387; email <u>vehni@aol.com</u>.