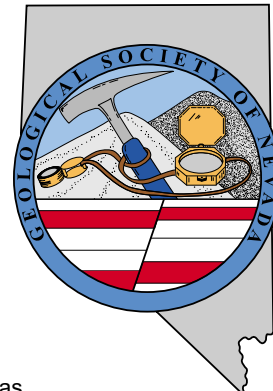


# GSN NEWSLETTER



September 2005, Vol. 20, No. 7

## PRESIDENT

**Dieter Krewedl**  
Krewedl Mineral Exploration  
dkrewedl@usamedia.tv

## VICE PRESIDENT

**Ellie Davie Leavitt**  
Consultant  
zoracdavie@aol.com

## SECRETARY

**Leslie Olmstead**  
Agnico-Eagle (USA) Limited  
lolmstead@agnico-eagleusa.com

## TREASURER

**Camille Prenn**  
Mine Development Associates  
cami@mda.com

## MEMBERSHIP CO-CHAIRS

**Greg McN. French**  
Consulting Geologist  
GMcNFrench@aol.com

## Dave Shadrick

Golden Odyssey Mining, Inc.  
Dshadrick@aol.com

## PUBLICATION CO-CHAIRS

**Elizabeth A. Zbinden**  
Round Mountain Gold Corp.  
E\_Zbinden@geology.reno.nv.us

## Ruth Carraher

Gold Summit Corp.  
racarraher@goldsummitcorp.com

## OFFICE MANAGER

**Laura Ruud**  
gsn@mines.unr.edu

## CALENDAR OF GSN EVENTS

- Sept 8 Thursday** WINNEMUCCA CHAPTER MEETING: Brook Miller, Newmont Midas. Title: "Aqueous Fluid Inclusions in the Butte, Montana Main Stage Vein System". Drinks/social at 6:30 pm, talk at 7:00 pm, Humboldt Room, Red Lion Inn and Casino. Contact Kim Craig, Chapter President, for more info, 775/529-5001 x1340, kim\_craig@Placerdome.com. See abstract on page 5.
- Sept 15 Thursday** ELKO CHAPTER MEETING: Western Folklife Center, Elko, NV. Speaker: Karl Marlowe. Title: "History, Mining and Geology of the Archimedes Gold Deposit, Eureka District, Nevada". Refreshments at 6:00 pm, presentation at 7:00 pm. Contact: John Watson, Chapter President, for more info: 775/738-2062, jwatson@barrick.com.
- Sept 21 Wednesday (NOTE DATE) CHANGE** GSN MEMBERSHIP MEETING: David Miller, Uranium Geologist and Member of the Wyoming State Legislature. Title: "Current State of the Uranium Exploration and Mining Industry". Reno Elks Lodge, 597 Kumle Ln, Reno, NV. Drinks at 6 pm, dinner at 7 pm, talk at 8 pm. Contact Laura Ruud for reservations, 775/323-3500, gsn@mines.unr.edu.
- Sept 29 Thursday** SOUTHERN NEVADA CHAPTER MEETING: Dr. Brenda Buck, UNLV Geoscience Dept. Title to be announced. Room 102, Lily Fong Geoscience Building, UNLV, Las Vegas, NV. The meeting starts at 6:30 pm and our social half-hour starts at 6:00 pm. All are welcome! Contact Melissa Hicks at 702/895-1162 or hicksm@unlv.nevada.edu.
- Oct 2** GSN 17<sup>th</sup> ANNUAL PICNIC: Rancho San Rafael Park, Highlands Pavillion. See page 4.
- Oct 7-9** GSN FALL FIELD TRIP: "Volcanic Geology, Volcanology, and Natural Resources of the Long Valley Caldera, California". Details and registration form on page 2.
- Oct 21** GSN MEMBERSHIP MEETING. Speaker: Eric Seedorff.

**GSN Newsletter is published monthly except June and July**

Geological Society of Nevada, PO Box 13375, Reno, NV 89507 USA, 775/323-3500, [www.gsnv.org](http://www.gsnv.org)  
Office location: Laxalt Mineral Research Center, Rm 266, UNR. Hours: Mon thru Fri, 9 am-12 noon

## FROM THE PRESIDENT

Dieter Krewedl, *GSN President 2004-2006*

The fourth annual Silver Summer Series held on August 17 turned out to be another highly informative and entertaining event. Doug Silver presented us with his current "un-biased" views on the price of gold, China's economic growth, and so forth. A summary of Doug's talk by Sally Kleiner is presented on page 10. We want to thank **Opal Adams** and **Rich DeLong** of **Enviroscientists** for hosting the event and also providing the refreshments along with **Cami** and **Neil Prenn** of **Mine Development Associates**.

The GSN 2005-2006 membership dinner meetings will start a month earlier this year with a meeting scheduled for **Wednesday, September 21** at the Reno Elks Lodge. David Miller, who is a uranium geologist with Strathmore Minerals and a member of the Wyoming House of Representative, will discuss the "Current state of the uranium exploration and mining industry". The recent rise in the uranium price (\$30.20/lb), a shortfall of uranium production versus demand and a renewed interest in nuclear

power have spurred the formation over the past two years of over 100 junior companies exploring for uranium. And, yes, there is active uranium exploration in Nevada. Please plan to attend the meeting and hear what Dave has to say

*continued on page 4*

### SEPTEMBER MEETING SPONSOR



## Eklund Drilling Company, Inc.

### IN ELKO

605 Union Pacific Way  
Elko, NV 89803  
(775) 738-1980  
Fax (775) 753-9229

### IN RENO

100 W. Liberty St. Ste 900  
Reno, NV 89501  
(775) 324-7730  
Fax (775) 322-6644



# News and Announcements

## GSN FALL 2005 FIELD TRIP

### “Volcanic Geology, Volcanology, and Natural Resources of the Long Valley Caldera, California”

The GSN Fall 2005 field trip will visit the Long Valley caldera. Field trip stops will focus on the Bishop tuff and very young volcanic products of continued magmatic activity in the region. The trip will include visits to a geothermal power plant, kaolinite deposit, and gold resource. Talks on both nights by scientists from the USGS and Long Valley Observatory will include summaries of past, present, and future (?) volcanic and hydrothermal activity in the region.

### Friday October 7

- 9:00 AM Meet at UNR parking lot
- 9:30 AM Bus leaves UNR promptly at 9:30 am
- 12:30 PM Lunch provided
- 1:00 PM Field stops: Conway Summit, Panum Crater, South Tufa, Inyo Craters
- 5:30 PM Arrive in Mammoth Lakes, Rodeway Inn
- 6:30 PM Cocktails
- 7:00 PM Dinner
- 8:00 PM Talk by Dave Hill/Maggie Mangan, USGS – Overview of geologic history of Long Valley caldera and Mammoth area, and present-day activity; monitoring by LVO

Overnight Lodging – Rodeway Inn, Mammoth Lakes

### Saturday October 8

- Continental Breakfast at Rodeway Inn
- 7:30 AM Leave Mammoth Lakes
- 8:15 AM Field stops: Bishop Tuff (pumice quarry N of Laws; Owens River Gorge – radial columnar jointing; and Powerhouse #1)
- 12:30 PM Lunch provided
- 1:30 PM Field stop: Big Pumice Cut, Casa Diablo till
- 3:00 PM Field stop: Mammoth Mountain, via gondola or Lookout Mountain by bus
- 5:30 PM Return to Rodeway Inn, Mammoth Lakes
- 6:30 PM Cocktails
- 7:00 PM Dinner
- 8:00 PM Talk by Chris Farrar, USGS – Overview of hydrology, hydrothermal activity, and mineral deposits, Long Valley caldera

Overnight Lodging – Rodeway Inn, Mammoth Lakes

### Sunday October 9

- 8:45 AM Leave Mammoth Lakes
- 9:00 AM Field stop: Tour of Ormat’s geothermal plant
- 10:30 AM Field stop: Hot Creek
- 11:30 AM Field stop: Marshland plants in lacustrine sediments
- 12:30 PM Field stop: Tour of Kaolinite Mine (bring sunglasses)
- 1:00 PM Lunch provided
- 1:30 PM Field stop: Tour of Long Valley Au resource
- 3:00 PM Return to Reno
- 6:00 PM Arrive UNR parking lot

Price includes transportation, overnight lodging, lunches, dinners, and guidebook. Reservations are on a **first-come, first-served basis**; attendance is limited to 60 participants. **Payment must be received in GSN office by September 23** for reservation guarantee.

Review of following website is highly recommended: <http://lvo.wr.usgs.gov/index.html>

**A number of student sponsorships are available. Please contact Laura at the GSN office.**

**Please complete and submit ASAP:**

### Fall 2005 Field Trip Sign Up

Name \_\_\_\_\_

Daytime Phone \_\_\_\_\_

Fax \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Email \_\_\_\_\_

Person to contact in case of emergency:

Name \_\_\_\_\_ Phone \_\_\_\_\_

---

Lodging needed in Mammoth: Y\_\_ N\_\_  
Single\_\_ Double\_\_

Roommate (or we will assign) \_\_\_\_\_

MEMBER COST:   double room                                 \$225.00  
                          single room                                 \$290.00  
                          w/o Mammoth lodging                         \$160.00

\*NON-MEMBER COST:

                          double room                                 \$275.00  
                          single room                                 \$340.00  
                          w/o Mammoth lodging                         \$210.00

\*Non-members are encouraged to become members of the GSN for \$30 annual dues in order to take advantage of the reduced rates.

Amount included with this form                                 \$ \_\_\_\_\_

Paid with Check # \_\_\_\_\_

Visa\_\_ MC\_\_ Exp Date \_\_\_\_\_

Credit Card# \_\_\_\_\_

Signature \_\_\_\_\_  
(as it appears on card)

**Payment must be made by September 23, 2005  
No refunds after September 30, 2005**

Fax: 775/323-3599 or mail to GSN office:  
P.O. Box 13375, Reno, NV 89507, or email to: [gsn@mines.unr.edu](mailto:gsn@mines.unr.edu)

# *GSN September 21, 2005 Membership Meeting*

---

**Date:** Wednesday, September 21, 2005

**Time:** Social-6:00, Dinner-7:00, Meeting-8:00

**Reservations:** 775/323-3500; fax 323-3599,  
e-mail gsn@mines.unr.edu

**Deadline:** Reserve by 11 am Tuesday, September 20<sup>th</sup>

**Location:** Elks Lodge, 597 Kumle Lane, Reno, NV

**Directions:** Across (W) from the Reno-Sparks Convention Center (S Virginia St), behind the Les Schwab Tire Center

**Speaker/topic:** David Miller, Uranium Geologist and Member of the Wyoming State Legislature

---

## **CURRENT STATE OF THE URANIUM EXPLORATION AND MINING INDUSTRY**

David Miller, Strathmore Minerals Corp and Wyoming Legislature Representative

Uranium mining and exploration have been dead for nearly 25 years. The surviving companies during a period of low prices and over supplied market can be broken down into the following three categories:

1. Government owned uranium companies such as COGEMA (French) and until 10 years ago CAMECO and the uranium supplied from Russia and CIS countries.
2. RTZ through its subsidiaries ERA Australia and Rossing Uranium.
3. By-product uranium, primarily WMC (now BHP) at Olympic Dam in Australia

The past uranium boom from the mid 1970's to early 1980 resulted in many discoveries in the United States and around the world. Follow-up on these discoveries will result in some of the new production planned in the next ten years.

The market situation in 1980 and now is the exact opposite. In 1980, we produced nearly twice as much uranium as we consumed world wide. Now we consume almost twice as much uranium as we produce. It has taken the last 25 years to burn the excess uranium. We are now entering a normal supply/demand market and prices will increase until the demand is met.

Technology has also changed. The remote mining necessary to mine the very high grade deposits in Canada is all recently developed. "In-situ" Leach or ISL technology was developed in Wyoming in the early 1960's. However, it did not come on strong until the end of the last uranium boom. For the US, ISL will be the dominant producer in the future. With ISL technology, what used to take 500 people to mine 1 million pounds per year using conventional underground or open pit mining methods and a conventional mill, ISL can do with 75 people and water well drill rigs. The environmental footprint is 1/10 of a conventional mine.

New exploration for uranium in the United States will be minimal. However, production should increase from the current 2 million pounds per year to an estimated 10 million pounds per year by 2012. The majority of the new production will come from previously discovered deposits.

Worldwide exploration will focus on Canada, Australia and Central Asia. New discoveries will be made. The majority of new production for the next 20 years will come from previously discovered deposits, like Cigar Lake in Canada and Jabiluka in Australia plus the expansion of Olympic Dam in Australia.

---

David Miller is currently a consultant for Strathmore Minerals Corp. and a member of the Wyoming House of Representatives. Dave earned his Bachelor's of Science degree in Geology from the University of Missouri in 1975. He worked for Pathfinder Mines Corp/Cogema for over 20 years as a uranium and gold exploration geologist and as manager of their ISL uranium resource assessment group. Dave has worked for Strathmore Minerals for a total of 3 years as a consultant on uranium property acquisitions, mine development and planning. For the past 3 years, Dave has also consulted for the International Atomic Energy Agency in Vienna reviewing world wide uranium resources. He was elected to the Wyoming House of Representatives in 2001 from District 55-Riverton and is currently serving his third term.

**FROM THE PRESIDENT** *continued from page 1*

about uranium exploration and mining. Also, three students will be presenting their research with posters during the meeting. As has been customary, **Eklund Drilling** will again be providing the drinks during the first meeting of the year and the GSN greatly appreciates their support.

During September, the entire membership will be asked to **vote on the proposed changes to our Constitution**, which will allow for the formation of the GSN Board of Directors. Details of the changes were presented in the August newsletter and will again be provided with the ballot that will be distributed to all members in September. The GSN Executive Committee unanimously approved these changes to our Constitution calling for the establishment of a governing Board of Directors, which will better meet the needs of a larger and more diversified Society as well as properly manage our financial investments. Previous GSN Presidents recognize the need for a Board of Directors and are very supportive in making these changes. Please take the time to read the information and vote in favor of making the changes to our Constitution.

The **GSN Fall field trip** scheduled from October 7<sup>th</sup> to 9<sup>th</sup> will be based out of Mammoth Lakes, California and will review the volcanic geology, volcanology, and natural resources of the Long Valley caldera. This will be the GSN's first trip to the Long Valley caldera and it should be a perfect time to see some spectacular scenery and geology. Ellie Leavitt has lined up experts to lead the tour including scientists from the USGS and Long Valley Observatory to discuss the geologic history, hydrology and hydrothermal activity of the area. We will also visit Ormat's geothermal plant, a kaolinite mine and the Long Valley gold resource. More details and a sign up sheet are provided on page 2 in this Newsletter.

Don't forget to **renew your GSN membership** for the June 2005/May 2006 fiscal year. The dues remain at \$30 per year, which will make you a member of one of the most active exploration groups in the Western US. A membership application/renewal form is provided on page 11 of this Newsletter. It is important to send your renewal as soon as possible in order to avoid any interruption in your Newsletter this Fall and listing in the GSN Directory in December. If you are unsure about whether you have renewed your dues this year, please contact Laura at the GSN office.

**STUDENT POSTERS  
at the GSN September 21<sup>st</sup>  
Membership Meeting**

**Aasha Pancha**

Investigation of Amplification Effects Within the Reno Area Basin from Ground Motion Recordings

**James Scott**

Three Urban Transects of Shallow Shear-velocity Using the Refraction Microtremor Method

**Gretchen Schmauder**

Thermal and Chemical Profiling of Gold Deposits in the Bald Mountain District

**BALLOT ON CHANGING THE  
GSN CONSTITUTION**

In September, a ballot will be sent to all GSN members to vote on amendments to the GSN Constitution to incorporate a Board of Directors as discussed in the August GSN Newsletter. Accompanying the ballot will be a copy of the revised Constitution and a diagram illustrating the proposed GSN Board of Directors governing structure.

Those members receiving their monthly GSN Newsletter via email will also receive their ballot and supporting information via email at the beginning of September. Those members, who receive hard copies of the GSN Newsletter via regular mail, will receive their ballot and supporting information as an insert in the September Newsletter. All ballots (emailed or hard copy) must be received at the GSN office by September 19, 2005 so that the results can be announced during the GSN membership meeting on September 21<sup>st</sup>.

**GSN'S 17<sup>th</sup> ANNUAL FAMILY PICNIC**

Sunday, October 2, 2005 at  
Rancho San Rafael, Highlands Pavillion, Noon - 5 PM

Bring the family for a fun afternoon of games, barbecue, beer, and lively conversation. Following tradition, the GSN Education Committee will provide the meat (four-legged kinds) and beverages, and we ask that you bring a salad, vegetable, or dessert to share. The price is a bargain at a mere \$5 per person or \$10 per family. Sign up today by filling in the form or calling Laura Ruud at the GSN office 775/323-3500, or email [gsn@mines.unr.edu](mailto:gsn@mines.unr.edu).



**17<sup>th</sup> ANNUAL GSN FAMILY PICNIC  
Rancho San Rafael, Highlands Pavillion**

Name: \_\_\_\_\_

Total # family members or guests in your party: \_\_\_\_\_

Ages of children: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_ Daytime phone: \_\_\_\_\_

Bringing salad: \_\_\_\_\_ vegetable: \_\_\_\_\_

or desert: \_\_\_\_\_

Enclosing: **\$10.00 per family** or **\$5.00 per single**

Credit Card # \_\_\_\_\_ or Check # \_\_\_\_\_

**Please mail to: Geological Society of Nevada  
PO Box 13375, Reno, NV 89507, or fax to: 775/323-3599**

## WINNEMUCCA CHAPTER

### SEPTEMBER 8<sup>TH</sup> MEETING

Brook Miller: "Aqueous Fluid Inclusions in the Butte, Montana Main Stage Vein System: Fluid Source and Evolution"

The Butte District consists of a porphyry copper deposit cut by a system of epithermal Main Stage veins that are 1-3 kilometers long and typically 0.5-5 meters wide. Main Stage veins are zoned from copper sulfides in the Central Zone, outward to chalcopyrite-sphalerite veins, then the Peripheral Zone of sphalerite, galena and rhodochrosite. Microthermometry on aqueous fluid inclusions in Main Stage quartz, rhodochrosite, sphalerite and fluorite reveals that the primary and secondary Main Stage fluid inclusions contain 5-30 volume percent vapor and homogenize between 194 and 346°C. Homogenization temperatures corrected for an estimated pressure of 70 MPa yield trapping temperatures of 240-425°C, with a mean of 323°C. Fluid inclusion ice melts between 0.0 and -4.7°C, with a mean of -2.1°C. Calculated fluid salinities corrected for a CO<sub>2</sub> molality of 0.20 yield an average of 2.89 weight percent NaCl equivalent. No homogenization temperature or salinity gradients are apparent within the District.

## TIN CUP TEA MUSEUM BENEFIT

Dust off your dancing shoes and get ready for the sixth annual Tin Cup Tea & Chuckwagon BBQ on September 16 at the Governor's Mansion in Carson City. Doors open at 6:00 PM and this year John Tyson will be our MC and Cowboy Poet for this exciting evening featuring tours of the Governor's Mansion, with displays of historic fashions and other remarkable items, wagons and buggies, and Nevada mineral and fossil specimens. Enjoy the western BBQ, take pleasure in libations, bid in the silent auction, watch the Guns & Gals of old Virginia City, and dance to the music of David John and the Comstock Cowboys. Tickets are \$45 each with all proceeds benefiting the W.M. Keck Earth Science and Mineral Engineering Museum and the Nevada State Museum. For more information, call Holly Austin at 775/687-4810 ext. 222.

## FREE EARTH SCIENCE WEEK PUBLIC FIELD TRIP 2005

Nevada Bureau of Mines and Geology  
October 22 OR October 23, 2005

### The Great Highway 50 Rock Tour

This year's Earth Science Week public field trip will start in Fallon and travel east to several sites of geologic interest along the way or within a few miles of Highway 50.

In keeping with the 2005 National Earth Science Week theme "Geoscientists Explore our Earth," we will discuss careers in the geosciences such as exploring for mineral resources, investigating Earth hazards to property and people, and monitoring of environmental change on Earth. We will have the opportunity to collect samples of a variety of minerals and rocks along the way. This approximately 150-mile round trip will take us to the following sites located 15 to 45 miles east of Fallon: Huck Salt operations, Project Shoal, Marble, Fairview Peak earthquake fault scarps, Bell Mountain Mine area, and Grimes Point wonderstone area.

You must sign up for this free field trip online at [www.nbmj.unr.edu](http://www.nbmj.unr.edu) by following the links for the 2005 Earth Science Week Field Trip, or call 775/784-6691, ext 152 if you do not have Internet access. Sign up for one of two identical day trips on either Oct. 22<sup>nd</sup> or 23<sup>rd</sup>.

You will need to bring your own insured, high-clearance vehicle (car-pooling is strongly encouraged), sturdy closed-toe shoes or hiking boots, lunch, water, snacks, sunscreen, hat, sunglasses, and first aid kit. No specialized equipment is necessary other than a collecting bag or small bucket, but you may want to bring a rock hammer if you have one. Descriptive labels of rocks and minerals will be provided. **Pets are welcome on leashes only!!!** All stops are adjacent to paved or gravel roads accessible by high-clearance vehicles, but some roads will be rocky, rutted and **very dusty!**

A complete road log with photos and a generalized map showing the location of the field trip stops will be available on the NBMG website in September. The trips will leave Fox Peak Station in Fallon at 9:00 a.m. each day. Each participant will be required to sign and turn in a waiver and release form prior to the field trip.

*Thank you to our  
generous donors*

### **GSN Foundation**

Steve Barnwell  
Keith Bettles  
Curt Everson  
Pamela Klessig  
David Mathewson  
Dan Rovig  
Roger Steininger

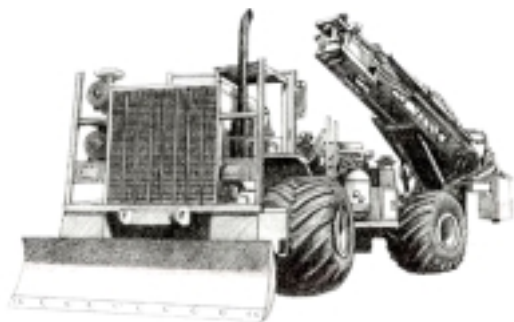
### **Student Dinner Fund**

Keith Bettles  
Terri Garside  
Vic Ridgley  
Dan Rovig  
Roger Steininger





## Diversified Drilling LLC



*Providing drilling services to the mining/  
metals industry since 1980*

3650 Grant Creek Road  
Missoula, Montana 59808  
(406) 542-1010 Fax (406) 542-5065  
Formerly Dateline Drilling, Inc.



## Carlin Trend Mining Supplies & Service

[www.carlintrend.com](http://www.carlintrend.com)

369 5th St., Elko, NV 89801  
(775) 778-0668, Fax: (775) 778-0687, [carlintrend@frontiernet.net](mailto:carlintrend@frontiernet.net)

Geological Consulting - Claim Staking - Soil Sampling  
Mineral Surveys - Mine Hazard Fencing  
Geology & Drafting Supplies - AutoCad & GIS  
Temporary Employees in All Fields



## Enviroscientists, Inc.

*Reliable Service for All Your Environmental Needs*

4600 Kietzke Lane, Suite C129, Reno, Nevada 89502  
Phone: (775) 826-8822 Fax: (775) 826-8857

Richard DeLong  
President

[www.enviroincus.com](http://www.enviroincus.com)

Opal Adams  
Vice President

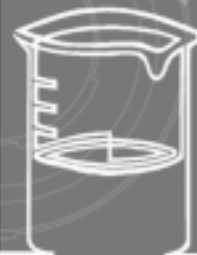
## ALS Chemex beyond expectations

**reno**  
tel: 775-356-5395

**elko**  
tel: 775-738-2054

**winnemucca**  
tel: 775-625-4192

for other locations around  
the world visit  
[www.alschemex.com](http://www.alschemex.com)



ALS Chemex

[www.alschemex.com](http://www.alschemex.com)

**NEW!**

ALS Chemex has  
opened a facility in  
Winnemucca to  
better serve our  
Nevada clients.

## MODERN SAMPLING THEORY COURSE

AMEC Mining Consulting Group of Reno, Nevada is hosting a one-week course in Quality Control and Sampling Theory on the U. NV Reno campus October 3 to 7. Learn from one of the world's foremost authorities how to apply the principles of Pierre Gy. Learn how to determine which step in your sampling/preparation process is controlling the overall precision of your results, and how to improve that step to obtain cost-effective improvement in your operation.

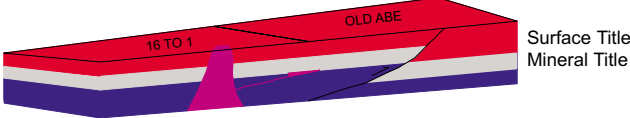
If you are an exploration geologist who has encountered too many anomalies that failed to be "confirmed" on subsequent trips to sample sites, have experienced a seemingly insurmountable "nugget effect"; a mine geologist or engineer troubled by reconciliation issues between mine model and production, chronic or episodic ore loss or ore dilution; or a metallurgist in need of more reliable samples from mill operations, this course may be of great benefit.

One day of the course will cover quality control issues related to sampling, preparation and analysis. The other four will be presented by Dr. Dominique Francois-Bongarcon an advisor and problem-solver to the international mining community for more than 20 years on applications of Gy's principles to their sampling problems.

The class is limited to 20 persons. Lunch and refreshments are included. A course fee of \$500 is required to help defray course costs. For more information and to enroll, contact Scott Long at [scott.long@amec.com](mailto:scott.long@amec.com) (602) 343 2437, or Todd Wakefield at [todd.wakefield@amec.com](mailto:todd.wakefield@amec.com), (775) 331 2375.




G.I.S. Land Services  
**Greg Ekins M.S. R.L.P. #32306** President  
 Mineral Landman - Computer Draftsman  
 "From Courthouse Records to Final Map"



AutoCad - ArcView - Mapinfo  
 Geologic, GeoChem and Land Status Maps  
[www.gislandservices.com](http://www.gislandservices.com)

E: [greg@gislandservices.com](mailto:greg@gislandservices.com) 6635 Broadridge Ct.  
 P: 775-746-8803 F: 775-746-8802 Reno, NV 89523



**JOSEPH R. ANZMAN**  
*Exploration Geophysicist*

- consulting
- interpretation
- project management
- geophysical surveys
- domestic & foreign

P.O. Box 370526  
 Denver, Colorado 80237  
 303-337-4559  
 telephone/fax

# Sample Bags

HUGE INVENTORY  LOW, LOW PRICES

**NEW ADDRESS!**  
**LEGEND, INC.**  
 988 Packer Way  
 Sparks, NV 89431

Off Glendale east of McCarran  
 phone: (775) 786-3003  
 fax: 786-3613  
[www.Lmine.com](http://www.Lmine.com)  
 email: [info@Lmine.com](mailto:info@Lmine.com)

## MINERAL EXPLORATION SERVICES

SOIL SAMPLING  
 CLAIMSTAKING  
 PROPERTY EVALUATION  
 MINE HAZARD FENCING

5655 Riggins Ct., #15, Reno, NV 89502  
 Tel: (775) 954-1082 Fax: (775) 829-6882  
 email: [day@mineralexploration.com](mailto:day@mineralexploration.com)

*Jo Beth Allen*  
**Professional Graphics**

---

CAD Drafting/Digitizing/Scanning  
 High Resolution Presentation Graphics  
 Plotting/Printing  
 Geologist

1055 Joshua Drive Phone: 775-324-7960  
 Reno, Nevada 89509 Fax: 775-324-7583  
[jobeth@yellowsb.net](mailto:jobeth@yellowsb.net)

Fire Assay  
 ICP - OES  
 ICP - MS  
 AAS  
 Custom Preparation  
 Bullion Analyses  
 BLEG

**Corporate Office**  
 1500 Glendale Avenue  
 Sparks, NV U.S.A. 89431-5902  
 Telephone (775) 356-0606  
 Fax (775) 356-1413

Chris Ioannakis, Managing Director,  
 Analytical Services



**American Assay & Environmental Laboratories**

**Elko Office**  
 2320 Last Chance Road  
 Elko, NV U.S.A. 89801-4852  
 Telephone/Fax (775) 738-9100

E-mail: [AALADMIN@aallabs.net](mailto:AALADMIN@aallabs.net)  
 Website: [www.aallabs.com](http://www.aallabs.com)

## WE CAN HELP!

- Environmental and exploration support services
- Celebrating 40 years of service to the mining industry
- Experience in Mexico / Canada / Alaska



**NORTH AMERICAN EXPLORATION INC.**  
**NORTH AMERICAN MINE SERVICES INC.**  
 GEOLOGY | GEOPHYSICS | GEOCHEMISTRY  
 HYDROLOGY | ENVIRONMENTAL SERVICES

447 North 300 West, Ste. 3 • Kaysville, Utah 84037 • Phone (801) 546-6453 Fax (801) 544-4554  
[nae@nae-xploration.com](mailto:nae@nae-xploration.com)

## Big Sky Geophysics

Clark Jorgensen, M.Sc.  
 Geophysicist

*Field Work  
 Processing  
 Interpretations*

P.O. Box 353 Phone: (406) 587-6330  
 Bozeman, MT 59771 Fax: (406) 587-6394  
 USA Mobile: (406) 580-9718  
[clark@bigskygeo.com](mailto:clark@bigskygeo.com)

**For more details, my background, and case studies,  
 visit my webpage at [www.bigskygeo.com](http://www.bigskygeo.com)**

## Petrographic and Ore Microscopy Services

for applications in the following areas:

- Base and Precious Metals
- Mineral Exploration
- Process Mineralogy
- Industrial Minerals
- Geological Mapping
- Forensic Geology



P.O. Box 10080  
 American Canyon, CA 94503  
 Phone: 707-553-2772  
 E-Mail: sfmicro@earthlink.net

**Schurer & Fuchs**

## GSN Newsletter Monthly Advertising Rates

Business card size (3 1/2 x 2'') \$ 50.00  
 Quarter page (3 1/2 x 4 3/4'') 150.00  
 Half page (4 3/4 x 7 1/2'') 300.00  
 Classified ads \$10/line  
 (up to business card size)

**For an advertising form, call the GSN office at 775/323-3500 or fax 323-3599. Digital or text ads must be received by the 20<sup>th</sup> of the month to appear in the following month's newsletter.**

## WOMEN'S MINING COALITION – UPDATE OF ACTIVITIES FOR 2005

### INTRODUCTION

The Women's Mining Coalition was organized in 1993 and is a nation-wide grassroots coalition supporting environmentally responsible mining. WMC membership has grown to include members and participants representing many mining industry sectors, such as: hardrock, coal, energy generation and transmission, construction materials, industrial minerals, transportation and the vendors and manufacturers who provide goods and services to the industry. WMC addresses mineral development issues important to the companies we work for and the communities in which we live. The WMC activities support the mineral development industries through its collaborative advocacy efforts nationwide.

### WMC 2005 ACTIVITIES

- *ANNUAL TRIP TO WASHINGTON, DC*

In April 2005 we completed our annual trip to Washington, DC, where 42 women representing 40 states addressed six key issues (energy legislation; National Mineral Policy; NEPA; ESA; an explosives tax; and reinstatement of funds for the USGS). We did this during meetings with Congress; at our 3<sup>rd</sup> Annual Mining Education Luncheon; and at a Congressional Hearing on critical workforce.

- *ADDITIONAL WORK*

We continue our outreach efforts at meetings and Expos such as the May GSN Symposium 2005 (THANKS to all of the GSN Symposium participants for helping to make the NEPA letter-writing campaign a success); and the petition signing campaign at the June 2005 Elko MinExpo (NEPA and the need for passage of an energy bill). Additionally, WMC participated in coordinated efforts to pass the energy bill with National Mining

Association and other trade associations. As well, WMC members have provided testimony at Congressional Hearings on important issues such as: Endangered Species Act; NEPA; Sustainable Development, the Mining Industry, and Communities; and workforce topics.

WMC welcomes your participation. Please contact Ann Carpenter or Ruth Carraher at [wmc@nevadamining.org](mailto:wmc@nevadamining.org), or 775/829-2121, ext. 16. We look forward to working with you, addressing mineral development issues important to the companies we work for and the communities in which we live.

## NEW NEVADA BUREAU OF MINES AND GEOLOGY PUBLICATIONS NOW AVAILABLE

**OF05-1** - Geologic map of the Kelly Creek area, Humboldt, Elko, and Lander Counties, Nevada by Joseph A. Laravie, two black-and-white 1:24,000-scale plates, folded or rolled, and 11 pages of text, \$25.00

**OF05-1** is also free on the Web at:  
<http://www.nbmjg.unr.edu/dox/dox.htm>

The following NBMG publication is now available free on the Web:

**OF98-8** - Trace-element geochemical data from mineralized samples from Nevada by Joseph V. Tingley (CD-ROM, 1998) is now available free on the web at:  
<http://www.nbmjg.unr.edu/dox/zip/of988.zip>

**VISIT THE GSN WEBSITE AT:  
[www.gsnv.org](http://www.gsnv.org)**



## ACTIVITY UPDATE

Mike Brady, July 2005  
www.activityupdate.com

### NEVADA

Atna Resources Ltd. announced that recent drill results at the Pinson/Range Front Project include 155-160 feet @ 0.102 opt Au (APRF-246); 575-580 feet @ 0.230 opt Au (APRF-247); 280-300 feet @ 0.229 opt Au (APRF-248); 350-400 feet @ 0.275 opt Au (APRF-248); 370-390 feet @ 0.208 opt Au (APRF-249) and 130-140 feet @ 0.152 opt Au (APRF-250). (resource = 1,760,000 tons @ 0.302 opt Au measured+indicated) *Press Release: July 11*

Metallic Ventures Gold Inc. announced that based on recent drill results at the Goldfield Project, resources aggregate 12,782,000 tons @ 0.037 opt Au measured; 4,071,000 tons @ 0.016 opt Au indicated and 1,001,000 tons @ 0.022 opt Au inferred. (was 6,651,000 tons @ 0.076 opt Au measured+indicated) *Press Release: July 13*

Metallic Ventures Gold Inc. announced that based on recent drill results at the McMahon Ridge Project, resources aggregate 4,087,000 tons @ 0.043 opt Au measured; 4,113,000 tons @ 0.026 opt Au indicated and 171,000 tons @ 0.019 opt Au inferred. (was 8,200,000 tons @ 0.035 opt Au measured+indicated) *Press Release: July 13*

Western Goldfields Inc., U.S. Gold Corp. and Romarco Minerals Inc. announced that they will merge on a yet to be determined basis. (Tonkin Springs = 10,637,000 tons @ 0.061 opt Au proven+probable) *N.M.: July 8*

Robert McEwen, former CEO of Goldcorp Inc. announced that he purchased 5,700,000 shares (10.5%) of White Knight Resources Ltd. for \$3,707,300. *M.J.: July 1*

New Sleeper Gold Ltd. announced that it acquired an option to earn a 55% interest in the Clover Property from Atna Resources Ltd. for \$2,000,000 in exploration expenditures over 4 years. *Press Release: July 19*

Quadra Mining Ltd. announced that it would add a molybdenum circuit at the Robinson Mine to produce 1,600,000 pounds/year at a capital cost of \$7,800,000. (reserve = 115,000,000 tons @ 0.72% Cu, 0.008 opt Au proven+probable) *P.D.: June 2005*

Placer Dome Inc. announced that it acquired an option to earn a 100% interest in the Mill Creek Property from X-Cal Resources Ltd. for \$5,000,000 cash. *N.M.: July 8*

Gateway Gold Corp. announced that based on recent drill results at the Big Springs Project, resources aggregate 904,200 tons @ 0.288 opt Au measured+indicated and 517,100 tons @ 0.248 opt Au inferred. (was 1,310,000 tons @ 0.095 opt Au) *Press Release: July 13*

Geologix (US) Inc. announced that it acquired an option to earn a 60% interest in the Scraper Springs Property from Metallic Ventures Inc. for \$1,500,000 in exploration expenditures over 5 years. *Press Release: July 19*

Miranda Gold Corp. announced that it acquired an option to earn a 100% interest in the Angel Wing Property from private interests for various advanced royalty payments. *Press Release: July 14*

Royal Standard Minerals Inc. announced that recent drill results at the Goldwedge Project include 460-535 feet @ 0.033 opt Au (GWD05-8); 155-230 feet @ 0.084 opt Au (GWD04-2) and 80-275 feet @ 0.035 opt Au (GWD04-6). (resource = 211,950 tons @ 0.494 opt Au measured) *Press Release: July 27*

Quadra Mining Ltd. announced that unstable ground conditions at the Robinson Mine will result in a rough 10% production short-fall for 2005. (reserve = 115,060,000 tons @ 0.72% Cu, 0.008 opt Au proven+probable) *M.J.: July 22*

## UPCOMING EVENTS

**Sept 8** - Nevada Petroleum Society – Lisa Shevenell, Nevada Bureau of Mines and Geology, "Exciting Research from the Great Basin Center for Geothermal Energy", Austin's Restaurant, 7671 South Virginia Street in Reno, NV. Cocktails at 6:30 p.m. Dinner is served at 7:00. The talk immediately follows dinner, 7:45 or 8:00 p.m. Reservations are required; please contact Diane Phillips at [trailsend@pyramid.net](mailto:trailsend@pyramid.net) or 775/267-4663.

**Sept 7-8** - Gold & Precious Metals Investment Conference, The Mirage Hotel, Las Vegas, NV. Organizers: International Investment Conf. Email: [iiconf@iiconf.com](mailto:iiconf@iiconf.com). [www.iiconf.com](http://www.iiconf.com).

**Sept 9** - SME, Northern Nevada Section – Adam House, Newmont Mining Corp. Topic – Phoenix Project. Gold "N" Silver Inn, Reno, NV. Lunch begins @ Noon. For reservations please contact Terry Albert @ KCA 775/972-7575.

**Sept 12** - Denver Region Exploration Geologists – Andreas Dietrich, "Bulk Rock and Melt Inclusion Geochemistry of Bolivia Tin Porphyry Systems". Consolidated Mutual Water Co. lower level, 12700 W 27th Ave., Lakewood, CO. Social hour 6:00 p.m. Presentation 7:00 p.m.

**Sept 19-24** - The Association of Engineering Geologists' annual conference (AEG-2005), Flamingo Las Vegas Hotel, Las Vegas, NV. Contacts: Jim Werle ([jwerle@converseconsultants.com](mailto:jwerle@converseconsultants.com)) and Barbara Luke ([bluke@ce.unlv.edu](mailto:bluke@ce.unlv.edu)); for more information see [www.aegweb.org](http://www.aegweb.org).

**Oct 4** - SME Northeastern Nevada Section, Mining Renaissance 2005 Technical Conference. Elko Convention Center, Elko, NV. [www.smenet.org/meetings/calendar/event\\_calendar.cfm](http://www.smenet.org/meetings/calendar/event_calendar.cfm) <[http://www.smenet.org/meetings/calendar/event\\_calendar.cfm](http://www.smenet.org/meetings/calendar/event_calendar.cfm)>

**Oct 15-19** - Geological Society of America Annual Meeting & Exhibition. Salt Lake City, UT. [www.geosociety.org/meetings/2005](http://www.geosociety.org/meetings/2005).

**Oct 16-19** - Heavy Minerals Conference 2005, Ponte Vedra Beach, Sawgrass Marriott, Jacksonville, FL. Organizers: Society of Mining, Metallurgy & Exploration. Email: [davis@smenet.org](mailto:davis@smenet.org). [www.smenet.org/meetings/HMC/index.cfm](http://www.smenet.org/meetings/HMC/index.cfm)

## THE SILVER SUMMER SERIES (S4)

Doug Silver, *How the world has changed since last August*  
Summary by Sally Kleiner

The Fourth Annual Silver Summer Series event took place on August 17<sup>th</sup>, drawing a crowd of more than 100 enthusiastic and curious GSN members and guests. Opal Adams and Rich DeLong generously hosted the event at their beautiful home in Golden Valley. Enviroscientists and Cami and Neil Prenn of Mine Development Associates provided the refreshments.



Opal Adams and Dave Caldwell

The esteemed speaker, Doug Silver, recently became the Chairman and CEO of International Royalty Corporation, a publically traded company specializing in the acquisition of royalties.

Doug's talk contained some very optimistic views of the metals markets mixed with

some strong cautions regarding underlying factors that could have a major effect on those markets. Doug cautioned that the role of China in the world economy could have a strong impact on metal prices and on the world economy in general. China's phenomenal growth in the past several years has placed that country as the number one consumer of copper, iron and aluminum and the world's second largest consumer of oil (behind the U.S.). He also pointed out that China holds \$780 billion dollars in U.S. Treasury bonds, which has helped to keep U.S. interest rates low. This could have an enormous effect on the U.S. economy if China starts to sell off those bonds. Doug also commented on the emergence of India as a major force in the global economy and suggested that its future role does bear watching. At home, the U.S. dollar increased in strength in 2005 and the economy is growing, but the deficit has also increased dramatically, influenced by factors such as the expense of the war in Iraq and the increase in oil prices.

Gold prices are staying strong due to many factors such as the uncertainty and expense of the war in Iraq, high oil prices, a decrease in global gold production and an increase in gold consumption in China. Doug also suggests that some of the factors that have caused gold prices to decline in the past such as the Central Bank selling a large quantity of gold won't happen soon.

Doug divides funding during exploration cycles into stages or "legs" where the initial stage is characterized by rapid increase in commodity values. Funding in this first stage goes to "seasoned and trusted" junior mining companies. Discoveries made using funds invested during this initial stage will help to promote another cycle of funding. A question was asked regarding the difficulty of obtaining funding for exploration at the current time. Doug responded that we need some new discoveries now to rejuvenate

interest in funding current and new projects. Did everybody hear that part? Let's hope for a productive field season with results that justify new investments. Somebody really needs to find that next orebody! Thanks, Doug.



Dieter Krewedl and Doug Silver

## GSN MEMBERS' PERSONAL NOTES & NEWS

### *Career Related Moves*

- ▶ Jake Margolis has recently joined Redstar Gold Corp. as its US Exploration Manager based in Reno. Redstar is initiating a Great Basin gold exploration program in alliance with AngloGold Ashanti.
- ▶ Dan McCoy has changed jobs and locations. He now heads up Keegan Resources Inc., a TSX junior with properties in Nevada and Ghana ([www.keeganresources.com](http://www.keeganresources.com)). You can give him a call at 775/336-1057, e-mail him at [danmc@keeganresources.com](mailto:danmc@keeganresources.com) or check out his new digs at 2470 Wrondel Way, Suite 215. He is usually game for a cup of Joe in the morning or a frosty adult beverage in the afternoon.
- ▶ David Harvey has left Round Mountain Gold and joined Roger Steininger and Don Ranta at Gryphon Gold. Dave will be working primarily on Gryphon's Borealis property.
- ▶ Larry James has joined NewWest Gold as Senior District Geologist for the Eastern Great Basin. Larry is based out of the Denver corporate headquarters but will be spending much of his time in the Eastern Great Basin.

**Members are encouraged to keep us informed about their own career related moves and awards, and deaths of GSN colleagues. Your information needs to be received by Laura at [gsn@mines.unr.edu](mailto:gsn@mines.unr.edu) by the 21<sup>st</sup> of each month.**



# GEOLOGICAL SOCIETY OF NEVADA

P.O. Box 13375, Reno, NV 89507 USA

Phone (775) 323-3500 • Fax (775) 323-3599 • gsn@mines.unr.edu • www.gsnv.org

Offices are located on the University of Nevada, Reno Campus, Laxalt Mineral Research Center, Room 266

Office hours: 9 am-12 noon, Monday through Friday • Office Manager: Laura Ruud

The Geological Society of Nevada (GSN) is a non-profit, educational organization whose principal objective is to promote the advancement of geological sciences, especially as they relate to Nevada. GSN supports the dissemination of information through meetings, field trips, publications and academic endeavors. Membership is open to geologists, geophysicists, geochemists, engineers, educators, students, prospectors or anyone else with an interest in the geological sciences and/or the goals of the GSN.

The GSN membership year begins in June. Annual dues of \$30.00 (\$15.00 for full time students) are due in the fall. The GSN sponsors a Field Trip in the Fall and one in the Spring of each year. Monthly meetings are held on the third Friday of each month, September through May. The following are sanctioned Chapters of the GSN: Elko Chapter, based in Elko; Southern Nevada Chapter, based in Las Vegas, and the Winnemucca Chapter, based in Winnemucca. Additional dues to these Chapters are \$5.00 annually. The \$5 Chapter dues are matched by \$5 from the GSN and go directly to the respective Chapter.

Please remember the GSN Foundation when renewing. Foundation dollars are used for the Kindergarten through 12<sup>th</sup> grade Field Trip Grant Program, Nevada Mapping Grants and University of Nevada scholarships.

<b>MEMBERSHIP APPLICATION/RENEWAL</b>		<b>DATE</b> _____
NAME: _____		POSITION/TITLE _____
CONSULTANT <input type="checkbox"/> COMPANY NAME: _____		
STUDENT <input type="checkbox"/> UNIVERSITY: _____		
ADDRESS: _____		
CITY: _____		STATE/PROVINCE: _____
ZIP: _____ - _____		COUNTRY: _____
PHONE: WORK _____		FAX _____
CELL _____		RESIDENCE _____
E-MAIL: _____		WEB SITE: _____
<input type="checkbox"/> WOULD YOU LIKE TO HAVE AN ASTERISK BY YOUR NAME IN THE DIRECTORY INDICATING YOU ARE AVAILABLE FOR CONSULTING?		
<input type="checkbox"/> I HAVE MET THE LICENSING REQUIREMENTS AND WANT "QP" (QUALIFIED PERSON) BY MY NAME IN THE DIRECTORY.		
I authorize GSN to send to me, via email: GSN announcements, publication updates, employment opportunities, etc.		Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Regular Membership Dues - email newsletter \$30.00	<input type="checkbox"/> Honorary	\$ _____
<input type="checkbox"/> Regular Membership Dues - hardcopy newsletter via postal service \$35.00	<input type="checkbox"/> Honorary	_____
<input type="checkbox"/> International Membership Dues - email newsletter only \$30.00		_____
<input type="checkbox"/> International Membership Dues - hardcopy newsletter via postal service \$45.00		_____
<input type="checkbox"/> Student Membership Dues - email newsletter only \$15.00		_____
<b>ADDITIONAL DUES</b> —The \$5 Chapter dues are matched by \$5 from the GSN and go directly to the respective Chapter		
<input type="checkbox"/> I wish to be a member of the Elko Chapter \$5.00		_____
<input type="checkbox"/> I wish to be a member of the Southern Nevada Chapter \$5.00		_____
<input type="checkbox"/> I wish to be a member of the Winnemucca Chapter \$5.00		_____
<b>STUDENT DINNER FUND</b>		
<input type="checkbox"/> I wish to donate to the GSN Student Dinner Fund		_____
<b>GSN FOUNDATION</b>		
<input type="checkbox"/> I wish to donate to the GSN Foundation		_____
(Donated funds will be used for unrestricted grants and scholarships unless otherwise specified _____.)		
<b>TOTAL DUE</b>		<b>\$</b> _____
Payment: <input type="checkbox"/> Check # _____ <input type="checkbox"/> Cash <input type="checkbox"/> Visa <input type="checkbox"/> MC Card # _____		
Exp. Date _____ Signature (as it appears on card) _____		
<b>Return with payment to: Geological Society of Nevada, P.O. Box 13375, Reno, NV 89507</b>		
<b>Fax to 775/323-3599, email gsn@mines.unr.edu</b>		

# GEOLOGICAL SOCIETY OF NEVADA



gsn@mines.unr.edu • www.gsnv.org  
Telephone (775) 323-3500 FAX (775) 323-3599  
Post Office Box 13375  
Reno NV 89507  
USA

NON PROFIT  
ORGANIZATION  
U.S. POSTAGE  
PAID  
RENO, NV  
PERMIT NO. 931



## **EKLUND DRILLING COMPANY INC.**

**WITH OFFICES TO SERVE YOU**

### **IN ELKO**

605 Union Pacific Way  
Elko, NV 89803  
(775) 738-1980  
Fax (775) 753-9229

### **IN RENO**

100 W. Liberty St.  
Ste 900  
Reno, NV 89501  
(775) 324-7730  
Fax (775) 322-6644