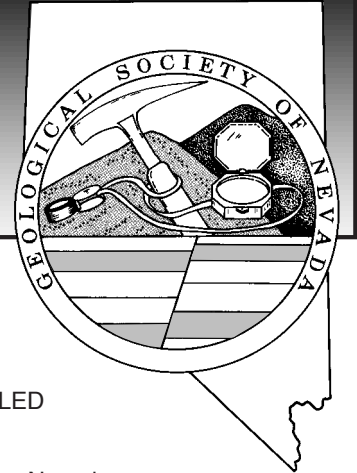


GSN NEWSLETTER



January 2001, Vol. 15, No. 1

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Laura Ruud
gsn@mines.unr.edu

CALENDAR OF EVENTS

- Jan 3** GSN WINNEMUCCA CHAPTER MEETING CANCELLED DUE TO HOLIDAYS.
- Jan 18** GSN ELKO CHAPTER MEETING: Hi Desert Inn, Elko, Nevada. Speaker - Fredrick (Rick) Schwarz, The Antamina deposit, Peru, a large, zoned copper-zinc-molybdenum-silver skarn. Drinks at 6:30, talk at 7:00 p.m. Call Keith Bettles, 775/778-8149 for information.
- Jan 19** GSN MEMBERSHIP MEETING: Reno Elks Lodge, Reno, NV. Speaker – Nicole Preuss, Senior Geologist, Equatorial Tonopah Mining Ltd, Copper in Nevada? Social-6:00, dinner-7:00 (\$17), talk-8:00. Details on page 3. Call Laura Ruud, 775/323-3500.
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GSN Newsletter is published monthly except June and July
Geological Society of Nevada, PO Box 12021, Reno, NV 89510-2021 USA, 775/323-3500

PRESIDENT'S MESSAGE

Ken Cunningham, GSN President 2000-2001

Once again, a thank you to all the members who attended the December GSN meeting and to everyone who donated items for the raffle. We had a large crowd estimated at 150-160. **ALS Chemex** kept us in good cheer by hosting the social hour(s) and **Odette's Catering** provided a tasty prime rib and chicken cordon bleu dinner. The raffle was a success with approximately 50 donated items including gemstones, old whiskey bottles (empty), mineral specimens, art, rare wine, desserts, mining artifacts, silver rounds, golf balls and company jackets. Many members left with treasures and the GSN Foundation made \$735 from the raffle. **Round Mountain Gold Corp.** generously donated a 1-ounce crystalline gold specimen that was auctioned to the highest bidder (Marty Dennis/Eklund Drilling) for \$900. **Sarah Andrews** entertained us and sold seventy autographed copies from her series of forensic geology mystery novels. Sarah donated the profits from these sales to the Foundation. In all, the Foundation raised over \$2100. I believe that everyone had a good time and that an evening of socializing and

fund raising will be the format for future GSN December meetings.

Next month, January 19th, we return to our technical format with **Nicole Preuss** giving us an update on Equatorial Tonopah's copper project. On February 16, Don Lewis will discuss Homestake's Valadero Project. Mark these dates and I hope to see you.

January Sponsor



Equatorial Tonopah, Inc.
P.O. Box 1569
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John T. Mears
Geology Superintendent

Phone: (775) 482-3813 Fax: (775) 482-3843

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News and Announcements

MEMBERSHIP ANNOUNCEMENT

Our membership for the 2000/2001 is now up to 775. This is great considering the crunch that our industry is currently feeling.

If you know anyone who has let their membership lapse and would still like to renew their dues, have them contact Laura Ruud at the GSN office, 775/323-3500 or email gsn@mines.unr.edu. Dues are \$30/year and \$5 for each GSN subchapter (Elko, Southern NV, and Winnemucca).

A membership form can be printed from the GSN website (www.gsnv.org) and faxed with a credit card # to 775/323-3599.

NORTHWEST MINING ASSOCIATION

GSN made its annual trek to the NWMA convention in Spokane, Washington, Dec. 6th through Dec. 8th. Although attendance was lower than in past years, the schedule of talks was strong and they were well attended. A big thanks goes to **Troy Haggard & Cash Allore of CGS Inc.** who included GSN's booth materials and books in their shipment to the convention. Thanks also to **Mine Development Associates** for donating their booth for GSN's use. It added quite a note of professionalism to GSN's display. Thanks to **Bill Walker and Robley Berry of Land Management Services, Inc.** for hauling some of our materials back to Reno and to those members who helped defray some of GSN's expenses on the road. It's this type of volunteerism that makes GSN a special organization.

2000-2001 GSN FIELD TRIP GRANTS

D.D. LaPointe, GSN Educational Committee Co-Chair

In November, members of the GSN Education Committee reviewed and evaluated more than 80 applications for GSN Earth Science Field Trip Grants totaling more than \$14,000. Of these, 73 were selected for partial funding using a budget of \$5000 allocated from the GSN Foundation plus a \$250 donation from WAAIME earmarked for 2000-2001 field trips. Because of the tremendous response to the program, we were able to fund only 38% to 50% of each request, hoping that the schools will be able to make up the difference to go on their proposed Earth science field trips.

The requests came from schools in Washoe, Clark, Churchill, Douglas, Lyon, Carson, Lincoln, Mineral, Nye, White Pine, and Humboldt Counties, and included 18 requests from "at risk" schools. The grants will help defray transportation costs for more than 4500 students to participate in Earth science-related field trips in the 2000-2001 school year. The school field trips proposed for funding include visits to the Hazen diatomite mine, Berlin-Ichthyosaur Park, Bodie, Kennecott-Rawhide Mine, Coeur-Rochester mine, Mono Lake, Yosemite, Pyramid Lake, Gerlach area, Lunar Crater, Virginia City, UNR Seismology Lab, Planetarium, and Keck Museum, Grover Hot Springs, Grimes Point, Lone Tree Mine, Great Basin Park, Crystal Peak, Adams Gypsum Mine, Steamboat geothermal plant, Valley of Fire, Granite Construction aggregate pit, and others.

Thanks to all who have supported the GSN Foundation fundraisers that provided the money to make these field experiences a reality for so many Nevada students.



Sarah Andrews, author, poses with Jon Price who was a valuable source of information in her latest novel "Eye for Gold." Thanks Sarah for your generosity to our Foundation!

DEANA (DE) BANOVICH

Manager, Client Services (USA)

ALS Chemex



994 Glendale Avenue Sparks NV USA 89431-5730

Phone: 775 356 5395 Fax: 775 355 0179

Mobile: 775 742 7371 Email: dbanovich@alschemex.com

Website: www.alschemex.com

Thanks to ALS Chemex for hosting the December Meeting

GSN January 19, 2001 Membership Meeting

Date: Friday, January 19, 2001
Time: Social-6:00, Dinner-7:00, Meeting-8:00
Cost: \$17.00 (dinner)
Reservations: phn 775/323-3500; fax 323-3599 or e-mail:
gsn@mines.unr.edu
Deadline: Reserve by noon Wednesday, January 17

Location: Elks Lodge, 597 Kumle Lane, Reno, Nevada
Directions: Across (W) from the Reno-Sparks Convention Center (S Virginia St), just behind the Les Schwab Tire Center
Speakers/topic: Nicole Preuss, Senior Geologist, Equatorial Tonopah Mining Ltd, Copper in Nevada.
See abstract below.

COPPER IN NEVADA?

Nicole Preuss, Senior Geologist, Equatorial Tonopah Mining Ltd

The Tonopah Copper deposit is located in the northern San Antonio Mountains of Nye County, Nevada. Copper is not the first mineral to have been mined from the area. In the past, silver and molybdenum were also mined. Liberty Springs was the site of the first mining in the area where sporadic silver mining occurred from 1876 to around 1900. Approximately 100,000 ounces of silver was mined during that period.

Clarence Hall developed an underground silver mine in what later became known as the Hall deposit. During World War II the U.S. Bureau of Mines identified the Hall deposit as a molybdenum resource, and in the late 1940s U.S. Vanadium purchased the deposit. In the mid-1960s the Anaconda Company procured the deposit and began developing the molybdenum orebody. Production started in 1979 and lasting through 1985. Subsequently the property was sold to Cyprus Metals who reopened the mine in 1986 and operated it through 1991. Most recently, Equatorial Mining purchased the copper portion of the deposit in mid-1997. The first copper was produced in early 2000.

There have been multiple intrusive events in the history of the Tonopah Copper deposit, the most important event being the composite intrusion of the Hall stock, 77 + 2 Ma. The stock created a proximal molybdenum/distal copper deposit that subsequently underwent extensional and rotational faulting. The copper enrichment occurred during supergene processes with the deposition of chalcocite below the paleo-water table. Extensive weathering and Basin and Range style faulting followed supergene enrichment. Potassic and argillic alteration are the dominant types of alteration found in the deposit.

Geologic modeling of the deposit has shown the resource to be 132 million tons at 0.31% total copper and the reserve to be 104 million tons at 0.34% total copper (year-end 1999). The overall stripping ratio is 0.7 to 1 with mining being done in 30 foot benches. Mining operations are done by a contract miner using hydraulic shovels and 150 ton haul trucks. The total current work force at the mine is approximately 180 people.

Processing begins with ore being crushed in a two stage system to 90% passing 1.5 inch screens. The crushed ore is then stacked on the leach pad in 20 foot lifts with concentrated sulfuric acid used as the primary leaching agent. Copper recovery is done in a three-stage, solution extraction/electrowinning plant. Currently, the mine is still in the ramping up phase with current production of 40,000 lbs of copper per day. Full production is targeted for September 2001 at which time the plant is scheduled to produce 150,000 lbs of copper per day at 99.999% pure.

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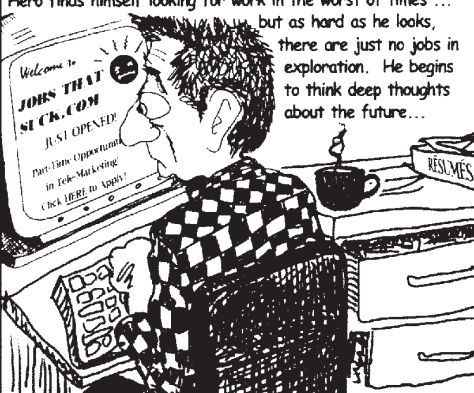
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Looking for work is never fun, even in the best of times. Our Hero finds himself looking for work in the worst of times ... but as hard as he looks, there are just no jobs in exploration. He begins to think deep thoughts about the future...



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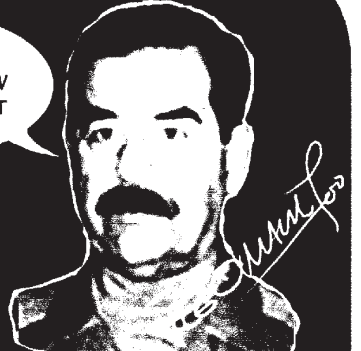
RESUMES

Thoroughly disgruntled, he types the most odious URL he can think of into his Search Engine, just to see what comes up. To his amazement, www.saddam.com produces surprising results!

WELCOME TO SADDAM.COM ...

HOW AM I DOING?
I WANT TO KNOW YOUR INNERMOST THOUGHTS!

CLICK HERE TO SEND AN E-MAIL TO SADDAM
 CLICK HERE TO JOIN THE JIHAD



Hmmm ... I never noticed how much this guy looks like "Super Mario" ...



Peg O'Malley Graphix
851-0185

Hesitantly, our Hero clicks a box and begins to write...

Dear Mr. Hussein,

What were you thinking when you replaced the Dollar with the Euro as the currency of payment for your oil? Paper is paper ... isn't one Great Satan pretty much the same as another?

If you really wanted to make a statement, why not demand GOLD? Gold is the only historically relevant hard currency. You could really screw with people. Just a thought.

a friend of gold

SEND

Much to our Hero's surprise, a month later, the Iraqis changed their monetary policy and designated gold as the only acceptable form of payment for their oil.

The world was plunged into chaos as governments scrambled to bolster their gold reserves. The price of the precious metal soared from a low of \$270/oz to well over \$1000/oz.

World stock markets fell, economies were rocked by instability, economic pundits were forced to re-examine policies, and Allan Greenspan hastily retired to southern Florida.

Dear a friend of gold,
Thank you for your thoughts. I will consider them.
xooo Saddam
P.S. Have you thought about joining the jihad?

As he rushes off to his new highly-paid job just outside Winnemucca, our Hero begins to think deep thoughts about the future.

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**Sherril Schmidt
is a GSN
scholarship
recipient.**

26 June, 2000

Nevada Bureau of Mines and Geology/MS 178
University of Nevada, Reno 89557-0088

Dear Mr. Cunningham,

I would like to thank you for awarding me a scholarship for the 2000-2001 academic school year. The acceptance of this scholarship is a great honor, as well as, an enormous help financially. This scholarship has made funding my education possible. I am greatly honored and would like to express my deepest thanks. Thank you again.

Sincerely,

Sherril Schmidt

Sherril Schmidt

UP-COMING EVENTS

Jan 4 Nevada Petroleum Society, Rutherford's Old South Restaurant, McCarran House at Sparks, NV. Dr. John Caskey, SF State Univ, "Structural Control of the Dixie Valley Geothermal System." Social-6:30 pm, dinner-7:00 pm, talk-8:00 pm. 775/747-6678 for information

Jan 8 Denver Region Exploration Geologists' Society monthly meeting at Denver, CO. 303/237-5368 or email: dregs@dregs.org

Jan 15-18 The Tailings and Mine Waste '01 Conf, Colorado State University at Fort Collins, CO. Call 970/491-6081 for more information. Email lhinchaw@engr.colostate.edu

Jan 18 GSN ELKO CHAPTER MEETING: Hi Desert Inn at Elko, NV. Fredrick (Rick) Schwarz, "The Antamina deposit, Peru, a large, zoned copper-zinc-molybdenum-silver skarn." Social-6:30, talk-7:00 pm. Call Keith Bettles, 775/778-8149 for information

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Jan 23-26 18th Annual Cordilleran Exploration roundup at Vancouver, BC. Contact B.C. & Yukon Chamber of Mines. 1-604-681-5328, www.bc-mining-house.com/rdup2001/welcome.htm

Jan 25 GSN SOUTHERN NEVADA CHAPTER MEETING: Lily Fong Geoscience Bldg, UNLV at Las Vegas, NV. Andrew Hanson, UNLV, "Organic geochemistry and linked tectonics and sedimentation of basins in NW China." Social-5:30 pm, talk-6:30 pm. Call Chris Reiken, 702/435-5664, for information

Jan 28-31 Int'l Society of Explosives Engineers -27th Annual Conf, Hyatt Orlando at Orlando, FL. 440/349-4004, www.isee.org

Feb 7 GSN WINNEMUCCA CHAPTER MEETING: Red Lion Inn & Casino, Humboldt Room at Winnemucca, NV. Speaker - TO BE ANNOUNCED. The bar will open at 6:45 pm, and the talk will begin at 7:30 pm. If you are not a GSNWC member, please contribute a \$5 donation at the door. Call Bruce Braginton, 775/625-5606 for information

Feb 14-16 Mexico Mining 2001 at Puerto Vallarta, Mexico. Contact Randol Int'l 303/526-1626. www.randol.com

Feb 26-28 SME Annual Meeting and Exhibit, Denver, CO. 1-800-763-3132 or 303-973-9550

Mar 11-14 Prospectors and Developers Association of Canada, Int'l Conv, Trade Show & Investors Exchange at Toronto, Canada. www.pdac.ca

May 6-10 CALL FOR PAPERS, 20th Int'l Geochemical Exploration Symp at Santiago de Chile. For information call 562 748 76771 (Acme Chile), www.aeg.org

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