

GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Room 107, Reno, NV 89512
(775) 323-3500 - Hours Monday -- Friday 8-3
Website: www.gsnv.org • E-mail: gsn@gsnv.org



February 2012, Vol. 28, No. 2

Published monthly except June and July

CALENDAR OF GSN EVENTS

The G.S.N. Office will be closed February 22-24, 2012.

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*Mark
Your
Calendar*

**Feb 8, 2012
Wednesday**

WINNEMUCCA CHAPTER (Every 2nd Wednesday of the month)

The monthly meeting will be held at the Martin Hotel, 94 West Railroad St. Drinks and Appetizers @ 6:30 PM, Talk @ 7:00 PM. SPEAKER: **John Muntean, Nevada Bureau of Mines & Geology. Title: "Ferroan Carbonates in Carlin-type Gold Deposits: Real Time Detection of an Important Ore Control by Carbonate Staining"**. (see abstract on pg. 7) **Sponsor for the evening is LEGARZA DRILLING.** For more info. contact Erin Gray @ 775-635-6420.

**Feb. 16, 2012
Thursday**

ELKO CHAPTER (Every 3rd Thursday of the month)

The monthly meeting will be held at the Western Folk Life Center, 501 Railroad St. Refreshments at 6:00 PM, Talk at 7:00 PM. Speaker: To Be Announced. For more information contact Jared Townsend at jtownsend@barrick.com; or Doug Eck, at deck@barrick.com.

**Feb 17, 2012
Friday**

GSN MEMBERSHIP MEETING (Every 3rd Friday of the month)

The monthly meeting will be held at the Reno Elks Lodge, 597 Kumble Lane, Reno. Drinks at 6:00 PM, Dinner at 7:00 PM, Talk at 8:00 PM. Our Speaker is **David Arbonies, Barrick Gold Exploration, Title: "Cortez Hills Lower Zone Discovery and Geologic Update"** (see abstract on page 3). Sponsor for the evening will be **CGS, Inc.** Dinner reservations must be made by NOON Thursday, Feb. 16th. Contact Laura Ruud at (775) 323-3500 or e-mail gsn@gsnv.org for reservations.

**Feb 23, 2012
Thursday**

SOUTHERN NEVADA CHAPTER (Every Last Thursday of the month)

The monthly meeting will be held at the Lilly Fong Geoscience building at UNLV, Room 105. Social hour begins at 6:45 pm with the speaker starting at roughly 7:15 pm. **Speaker TBA.** For more information contact R. Paul Bowen, 702-247-7765.

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FROM THE PRESIDENT
William Howald, G.S.N. President 2011—2012

Dear GSN Members:

I hope everyone enjoyed Greg Hall's presentation on gold deposits and how Carlin-type deposits may fit in to a unified gold deposit theory. I know several people have asked if they can have a copy of the presentation. Greg has given permission to distribute an electronic version of the presentation, and Laura can make a copy if you bring her a flash drive or CDROM to the GSN office.

At the January meeting, I forgot to mention the GSN now has a membership of 1,139 members. Laura is diligently working on the 2012 directory which I am told will be ready for distribution at the February meeting. I'd like to thank Carmen Arbizu, membership chairperson, and Laura Ruud, GSN office manager, for working hard to increase the membership. They made a tremendous effort that delivered results. I originally thought the goal of 1,300 members would be a big stretch but we almost made it, and I'm sure we will add to the numbers before the end of May. It's great to see the interest in GSN increasing as well as the student component of our organization.

At the February meeting, David Arbonies of Barrick will talk on the Cortez Hills gold deposit. This will be an exciting talk on Nevada's newest mine in a district that just keeps on giving – Redhills and Goldrush discoveries. I believe, when it is all said and done, the gold endowment along the Cortez trend will rival the Carlin trend. On another note, we are having a poster session for anyone – student or seasoned veteran -- interested in presenting a poster at the February GSN meeting.

I can't stop thinking of Jon Price's November presentation showing consumption for iron (400%) and copper (800%) increasing over the last 100 years. The world population has increased roughly 4-times in that same period, and I don't believe we will stop making babies anytime soon so demand should continue (Okay, some of us will!). Similarly for gold, the consumption per person has stayed constant for the past 100 years, but population and the consumer-class continue to become larger, so gold production is up over 400%.

In 2010, China had 19% of world population but was the number one producer of 25 separate commodities and was one of the top-three producers for 31 commodities. The combined totals for Russia, Australia and the United States are 7 and 35 respectively. China continues to scour the world for minerals they lack. In Africa, China is permitting and building a sub-Saharan railway from Angola on the west to Tanzania on the east, and they are buying all the commodities along the route. Specifically, the commodities they lack domestically are Au, Cu, Co, K, PGEs, Ni and Cr.

China's business model in Africa is well established and unlike the western world, its foreign aid generally comes with "no strings attached". This business model makes it difficult for the western world to compete for strategic metal supplies in Africa.

As we have seen recently with rare earth elements (REEs), China is able to cause markets to react to their domestic policies. An example is reducing the amount of exports of REEs, which is good for REE explorers and miners in the rest of the world. The tungsten, tin and barite markets suffer the opposite. China's ability to produce these commodities at low costs and flood the market with product keeps the price low and new deposits offline or undeveloped. Entire exploration programs have been shelved because there seems to be no end in sight.

The dominance of foreign suppliers, and the insignificance given to domestic producers of minerals for our everyday lives, has given the casual observer the impression that copper comes from the hardware store, and you get gold from a jeweler. The consequence of an out-of-sight, out-of-mind approach manifests itself in the dismantling of mineral resource education programs, a lack of a coherent mineral policy at the state and federal level, and a dependence on foreign supply of strategic minerals. This trend is not apparent in commodity-based countries such as Chile, Canada and Australia - where the earth and resource sciences are still in high demand and highly valued.

As we work toward more renewable energy solutions, minerals will be required to create, build and manufacture these technologies. Luckily in Nevada, we have a number of commodities that green industries require; commodities that China wants to meet its domestic demand; and commodities that are required to meet global demands. The GSN needs to keep up its good work of educating consumers and society that most gadgets, fertilizers, and technology start with something mined, and Nevada is geologically one of the best places to find it.

To find out more about the leadership role Nevada has, I've attached a link to Jon Price's November GSN presentation so you can be as excited about the future as I am.

http://www.nbmg.unr.edu/docs/Presentations/Update_Future_of_Mineral_Resources_18November2011.pdf

A mile high, a mile deep

**"If it can't be grown,
it's gotta be mined"**

**Thanks to ENVIROTECH DRILLING LLC
For Hosting the January 20, 2012 Meeting!**

GSN February 17, 2012 Membership Meeting

Reservations Are Required - Please Cancel if You Are Unable to Attend

GSN CAN NO LONGER GUARANTEE DINNER SEATING WITHOUT ADVANCE RESERVATIONS.
Please call 775-323-3500, Fax 775-323-3599 or e-mail gsn@gsnv.org by **NOON on Thursday, February 16, 2012.**
Social Hour: 6:00 PM – Dinner: 7:00 PM – Speaker: 8:00 PM
\$17.00 per person

Location: Elks Lodge, 597 Kumle Lane, Reno, NV
Directions: across (W) from the Reno-Sparks Convention Center
(S. Virginia Street, behind the Les Schwab Tire Center)

**Prepaid dinner reservations will only be accepted for the current monthly meeting.
Cancellations must be received two days before the meeting in order for your money to be refunded.**

“Cortez Hills Lower Zone Discovery and Geologic Update”

By Dave Arbonies, Kevin Creel, and Meghan Jackson

Barrick Gold Corporation—Cortez Gold Mine

Abstract

The Cortez Hills Complex is comprised of two in-situ and connected Carlin-Type ore bodies with differing geometries and an exotic satellite deposit (Pediment deposit) which is the eroded and re-deposited top of the subcropping Cortez Hills orebody. The main deposit consists of a conical shaped polyolithic breccia located between Tertiary quartz porphyry sills which cut Devonian Wenban Limestone and locally recognized Horse Canyon Formation (Rodeo Creek Formation equivalent). This zone is referred to as the Cortez Hills Breccia Zone (CHBZ) and is currently being mined from surface and underground operations. During the delineation of the CHBZ, a “Lower Zone” was recognized as differing from the CHBZ due to its tabular geometry and refractory character. Subsequent exploration delineated the Cortez Hills Lower Zone (CHLZ) and showed that gold mineralization is localized along the north-northwest trending intersection of a complex low angle structural zone and a steeply west dipping, north-northwest striking dike swarm. The structural zone hosting gold mineralization is know as the Ponderosa Fault Zone and transects the carbonate section from the Hanson Creek Dolomite to the south, through the Roberts Mountains Formation to the base of the Wenban Limestone to the north. The formations are locally folded and imbricated within the Ponderosa fault zone. Tertiary quartz porphyry rhyolite dikes and sills also occupy the Ponderosa Fault. The Ponderosa Fault is the structural conduit that fed ore fluids into the CHBZ. The CHLZ ranges from 1,500 ft to 3,000 ft below ground surface. Gold mineralization in the CHLZ is dominantly refractory to the north and transitions to dominantly oxide as the zone plunges to the south. Gold is associated with decarbonization and local silicification. Despite the presence of intensely decalcified groundmass, some mineralized intercepts are associated with abundant calcite veining. The gold system exhibits classic Carlin-type geochemistry with gold mineralization closely associated with anomalous concentrations of arsenic, mercury, antimony and thallium. CHLZ gold mineralization was discovered in 2003, and focused surface drilling delineated the resource from 2005-2007. The CHLZ remains open to the south and at depth and is being explored from underground drilling platforms.

SPEAKER BIOGRAPHY: Dave Arbonies, Senior Geologist, Barrick Gold Exploration

1984 Graduate of Mackay School of Mines

I am currently based at Barrick Cortez in charge of Cortez West Window projects including overseeing the exploration and development drilling of the Cortez Lower Zone. I have been at Barrick for 15 years and at Cortez for 3 years. Prior to Cortez I was involved in exploration for Carlin Type Gold deposits within the North Carlin trend, Getchell Trend and Battle MT- Eureka Trend.

I spent 10 years with Placer Dome based primarily out of Bald Mountain doing exploration and development of Intrusive Related and Carlin Type gold deposits My early career was working with Shell Mining Company, Resource Associates of Alaska and various junior companies.

FACES OF GSN

Elizabeth Zbinden

Geologist and Geochemist

G.S.N. Publications Chair, 2001-2006 and Symposia Volunteer

Thank you to GSN for asking me to write this. Geology has satisfied my joy in travel and adventure; reading through previous entries in the Faces of GSN series impresses me with how common a theme this is for GSN members.

I was born in Kansas while my dad was in the Army; after completing service my dad taught German language & literature, and my mother was a storyteller in public school libraries. Along with one younger sister I grew up in Pennsylvania and Ohio. As a toddler I would pick up pretty rocks when out on walks with my mother. A bit older, I enjoyed Girl Scout camping. I did not think of these in terms of a geology career until getting to college and taking a geology course. I discovered one could collect rocks, go camping, hang out drinking beer with interesting people, and figure out how the world around us works. What a winning combination!



After completing the B.S. in geology from Northwestern University, I moved along to University of Hawaii for a master's degree. At U.H. there are two obvious choices for concentrations in earth sciences: volcanoes or oceans. I picked volcanoes. My studies were funded by a fellowship from the East-West Center. EWC is a think-tank funded jointly by the governments of USA and several Asia-Pacific nations. It sponsors graduate students and mid-career professionals to work on issues of significance to the Asia-Pacific region. I thought I could get a master's degree and save the world at the same time. Well, I did get the master's degree.

At that point I started an academic career as research assistant in geological sciences at Harvard; I moved from Honolulu to Boston in the heart of winter (on a January 1st) just to reinforce the contrast. I worked with geochemist and economic geologist Dick Holland. The topic of study was the evolution of earth's early atmosphere using paleosols developed before land plants evolved. The story is that the soils represented equilibrium between rock and atmosphere and we could infer the composition of the atmosphere that produced the observed weathering horizons. It was during this time that I first visited mines: we looked for paleosols preserved at unconformity surfaces beneath Witwatersrand gold and Elliot Lake uranium deposits.

After a few years of that it seemed necessary to go for a Ph.D. so I went back to the other side of the country again for the geochemistry program at Stanford. I was interested in volcanic volatiles and wanted to learn experimental geochemistry. I enjoyed the experimental geochemistry and also enjoyed hanging out with the ore deposits exploration (ODEX) group -- they seemed to have more fun than any other group. My project combined both, by looking at the fumarolic transport of tin around the Taylor Creek Rhyolite of New Mexico. I feel privileged to have both Jonathan Stebbins and Marco Einaudi as advisors.

During my time at Stanford I was quite active in the Bay Area chapter of AWG (Association for Women Geoscientists). A colleague at AWG introduced me to an old high school buddy of hers, James Bell. James is now my AWG trophy husband. He is an aeronautical engineer with NASA, but accompanies me on many geology adventures.

Upon finishing the degree I applied for jobs many places in the world, but it was the one in Nevada that came through -- thank you to Jake Margolis for giving me a foot in the door with a Geotemps contract position at Homestake's exploration office in Sparks. This was in 1996, which turned out to be rather a poor time to enter the gold exploration and mining business. But I hung in there with a series of contract positions and learned to enjoy moving from job to job. In that time, GSN became family and a good reason to stay rooted here even while traveling elsewhere to work. I have worked with GSN over the course of three symposia (plus a mini-symposium in spring 2001) and as publication chair for five years.

Though contract work was fine, I really wanted to try out a "permanent" job and I finally got a staff position at Round Mountain Gold Company. It was a great group of people to work with, and what I was hoping for -- but then I

had an opportunity to go to Mongolia with Canadian junior QGX. I was reluctant to quit, but such an opportunity was not to be passed up. No sooner had I arrived in Mongolia than the parliament changed its mining law, making it much less favorable for foreign exploration firms there. My job changed from the planned development drilling on a VMS gold-copper deposit to shoe-leather and rock-hammer exploration, evaluating a set of licenses to recommend which ones would be worth keeping in the new legal environment. Not surprisingly, the job lasted only the one season, but I was able to continue international work at Sepon Mine, a copper-gold mine in Laos run by the Australian company Oxiana. Sepon's claim to fame is that it is built right on what was once the Ho Chi Minh Trail. Every place we moved had to be cleared by the EOD (explosive ordnance demolition) teams. When the copper price crashed in fall 2008 I returned to the US, a little disappointed to be returning to plain old home. How silly! I next worked at Briggs Mine in Panamint Valley, California, and quickly began to appreciate that, to people from the jungles of Southeast Asia (for example), Basin and Range deserts are pretty darned exotic too.



Burning Man

Exotic #2



To illustrate this memoir, I include a picture of myself and James at exotic #1, Angkor Wat in Cambodia, and exotic #2, Burning Man on the Black Rock Desert of Nevada. For all the joys of traveling, the joys of geology started out for me with picking up pretty rocks. So I also include a picture of me working with pretty rocks, logging core at Yerington.

Elizabeth Zbinden

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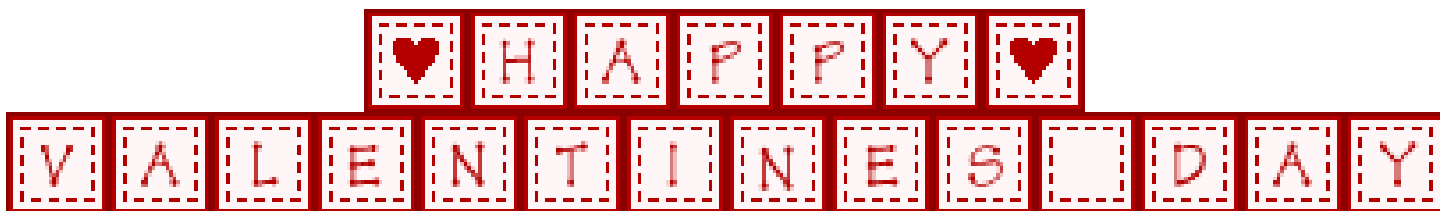
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The purpose of the "Rock Talk" section is to provide a forum for GSN members to express opinions and geological experiences that would be of interest to members. Topics should be related to geology, mining, and exploration, and could include travel and field experiences or other items of interest to geologists.

The decision to publish each article will be made by the Executive Committee. Articles are limited to 250 words and interesting photos will also be considered for publication. The writer must include his/her name, telephone number, and email address. Articles may be edited for clarity. Articles should be submitted to gsn@gsnv.org with "Rock Talk" in the subject line. They can also be mailed or FAXED to the GSN office.

GSN hopes that this will provide a forum for communicating interesting items to the more than 1,100 members worldwide. Please submit your article today!

G.S.N. WINNEMUCCA CHAPTER MEETING

February 8, 2012

Ferroan Carbonates in Carlin-type Gold Deposits:
Real Time Detection of an Important Ore Control by Carbonate Staining

John Muntean
Nevada Bureau of Mines and Geology
University of Nevada Reno

Michael Cassinerio
Barrick Gold Corp.

Lucia Patterson
Timberline Resources Corp.

Carbonate staining is an inexpensive, real time tool to detect ferroan carbonate, an important ore control in Carlin-type gold deposits. Studies are increasingly showing a close spatial association between ore and wall rocks containing ferroan dolomite or ferroan calcite. These ferroan carbonates are important in that when they are dissolved by acidic, gold-bearing hydrothermal fluids, they release iron which reacts with reduced sulfide in the fluid, destabilizing gold-sulfide aqueous complexes, resulting in deposition of gold-bearing pyrite. This process, known as sulfidation, is widely regarded as the principal depositional mechanism for gold in Carlin-type deposits. Carbonates can be stained by dilute hydrochloric acid containing both alizarin red S and potassium ferricyanide to differentiate between calcite, ferroan calcite, ferroan dolomite and dolomite. Staining needs to be done carefully in conjunction with a good hand lens, because other iron-bearing phases in the rock, such as pyrite and iron-bearing clays, can cause "iron-bleeding" and misleading results. Electron microprobe analyses of carbonates show the staining is sensitive down to 0.1 wt% Fe.

Detailed carbonate staining by the authors at the Turquoise Ridge deposit reveals a distinct spatial relationship between gold, ferroan calcite, and the southern margin of a thick Paleozoic basalt. High-grade gold ore in the HGB zone occurs exclusively within ferroan calcite-bearing host rocks. The transition from ferroan calcite (mainly 0.1-1 wt% Fe) to calcite (mainly <0.1 wt% Fe) occurs at the base of the HGB. Staining of carbonates at the base of the Roberts Mountain Formation along the Saval discontinuity in drill holes across the entire Jerritt Canyon district shows a close spatial association between the gold deposits and host rocks containing ferroan dolomite (mainly 0.5-2.75 wt% Fe). Others have reported a spatial association between ferroan dolomite and gold at Twin Creeks, Meikle, Storm, and Deep Star. At Twin Creeks, ferroan dolomite was interpreted to form during Cretaceous sericitization of Paleozoic basalts, which mobilized iron into interbedded carbonates. We envision an analogous process at Turquoise Ridge. At Meikle ferroan dolomite was interpreted to form by either syn-sedimentary exhalative processes or by a late Paleozoic brine. Such a late Paleozoic brine event was probably also responsible for formation of ferroan dolomite at Jerritt Canyon. In every case, ferroan carbonate is interpreted to form prior to Eocene-age Carlin-type gold mineralization, and, in effect, is critical pre-ore chemical rock preparation for subsequent ore formation. We highly recommend routine carbonate staining of prospective host rocks in exploration for carbonate-hosted gold deposits of all types.

NORTHERN NEVADA SECTION OF SME

Monday, February 13, 2012

Social Hour 6 PM, Dinner 6:45 PM and Talk at 7:30 PM

Circus - Circus Hotel and Resort

Mandalay Room in Convention Center

500 N Sierra Street, Reno, NV

Members \$22/person and Non-Members \$25/person

Free for UNR Students

Please RSVP by Noon, Friday, January 5, 2012

Kaitlin Sweet 775-225-6147 or

KCSweet@enviroincus.com

"A Methodological Model to Assist in the Optimization and Risk Management of Mining Investment Decisions"

Jose Botin, Chairman Mining Engineering

Henry Krumb Lecturer

WINNEMUCCA CHAPTER FEBRUARY 2012 MEETING SPONSOR



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CALL FOR POSTERS!

The G.S.N. invites any member to give a Poster Presentation of whatever they are working on at the next Reno meeting.

DATE: February 17, 2012

TIME: 6:00—8:00 p.m.

PLACE: Reno Elks Lodge, 597 Kumle

POSTER SIZE: 4 ft. X 8 ft.

Contact the GSN office for more info.
775-323-3500; email: gsn@gsnv.org

GOOD NEWS FROM CARSON CITY

Alan Coyner

As of January 31, 2012, the Nevada Board of Examiners has approved refunds to 571 mining claimants for a total of approximately \$14.5 million of the \$18.1 million collected by the State. Refunds are being processed by the Nevada Department of Taxation and the refund form is available on their website at <http://tax.state.nv.us>.



New at Nevada Bureau of Mines and Geology:

New geologic map of Iceberg Canyon

M166: Geologic map of the **Iceberg Canyon** quadrangle, Clark County, Nevada and Mohave County, Arizona, *with text entitled* Overview of the stratigraphy and structure of the Iceberg Canyon quadrangle, Clark County, Nevada and Mohave County, Arizona, by Robert J. Brady, Joan E. Fryxell, and Brian P. Wernicke, 2011, one 30X36-inch color plate and 16 pages of text for \$26.00; plate only for \$16.00; available rolled or folded.

A 1:24,000-scale, color geologic map of the Iceberg Canyon 7.5-minute quadrangle, in Clark County, Nevada and Mohave County, Arizona, with descriptions of 40 geologic units. Accompanying text includes overview of the stratigraphy and structure, full unit descriptions, and references. M166 supersedes OF03-18.

Available *free on the Web*: <http://www.nbmgs.unr.edu/sales/pbsdtls.php?sku=M166>

Digital historical topographic maps now available for Nevada from the U.S.G.S. Store

From: Carol L Ostergren <costergren@usgs.gov>

Digital historical topographic maps are now available for Nevada. USGS has just posted its historical topographic map collection for the state of Nevada online for download by the public. This map collection includes over 3,634 historic maps across the state with some maps dating back over 100 years. All published map scales are available, including: 7.5-minute (1:24,000), 15-minute (~1:63,000), 30-minute (1:100,000), and 1x2 degree (1:250,000), and have been scanned at a higher density than previous DRG editions.

You are invited to access the collection and download any of the maps.

To get the maps, visit the USGS Store site at: store.usgs.gov <<http://store.usgs.gov/>>

Then click on the "Map Locator & Downloader" in the center of the page.

From there you can locate your favorite maps in NV by searching by map or place name or by pan/zoom on the viewer. Maps are available as GeoPDF® files (viewable in your Adobe reader).

Activity Update

Mike Brady, December 2011

Nevada

www.activityupdate.com

NEVADA

KGHM Polska Miedz SA. announced that it offered to acquire Quadra FNX Mining Ltd. for \$14.70/share or a total value of \$2,800,000,000. (reserve @ Robinson = 110,000,000 tonnes @ 0.50% Cu, 0.17 gpt Au proven+probable) *M.J.*: December 9

Rye Patch Gold Corp. announced that it located new mining claims to cover a portion of the Rochester Mine since Coeur d'Alene Mines Corp. failed to properly file their original claims with the Bureau of Land Management. *M.J.*: December 9

Miranda Gold Corp. announced that recent drill results at the Big Blue Project include 3.0-12.2 meters @ 1.63 gpt Au (BBR11-01); 21.3-22.9 meters @ 0.52 gpt Au (BBR11-02) and 16.8-24.4 meters @ 1.49 gpt Au (BBR11-03). *Press Release*: December 21

International Millennium Mining Corp. announced that recent drill results at the Nivloc Project include 52.64 meters @ 53.3 gpt Ag, 0.64 gpt Au (11NL-29) and 59.8 meters @ 98.6 gpt Ag, 0.31 gpt Au (11NL-30). (resource = 564,500 tonnes @ 1.0 gpt Au, 153.5 gpt Ag inferred) *Press Release*: December 21

CBRE Group announced that it purchased all the rights to 1,280,000 acres of private lands in northern Nevada from Pico Holdings LLC. for \$31,000,000. *Reno/G-J*: December 9

International Minerals Corp. announced that recent drill results at the Converse Project include 143-160 meters @ 1.0 gpt Au (CONV-02C); 82-410 meters @ 0.70 gpt Au (CONV-04C); 136-285 meters @ 0.90 gpt Au (CONV-05C) and 251-294 meters @ 0.60 gpt Au (CONV-06C). (resource = 331,000,000 tonnes @ 0.48 gpt Au measured+indicated) *Press Release*: November 29

West Kirkland Mining Inc. announced that recent drill results at the TUG Project include 193.55-240.79 meters @ 0.52 gpt Au, 18.2 gpt Ag (WT11-07). *Press Release*: December 8

Silver Predator Corp. announced that it offered to acquire Nevgold Resources Corp. through a 0.5 share Silver

Predator/1.0 share Nevgold exchange basis. *Press Release*: December 12

Miranda Gold Corp. announced that recent drill results at the Angel Wing Project include 22.9-24.4 meters @ 1.03 gpt Au (AW11-07); 35.7-39.6 meters @ 1.25 gpt Au (AW11-C03); 81.7-87.8 meters @ 0.72 gpt Au (AW11-C03) and 28.7-32.6 meters @ 0.75 gpt Au (AW11-C01). *Press Release*: December 23

Midway Gold Corp. announced that recent drill results at the Tonopah/Midway Project include 52.9-99.5 meters @ 2.67 gpt Au (MW11-08C); 46.6-92.7 meters @ 7.68 gpt Au (MW11-09C); 40.5-57.0 meters @ 0.69 gpt Au (MW11-10C) and 39.3-69.8 meters @ 2.09 gpt Au (MW11-11C). (resource = 103,600 tonnes @ 10.31 gpt Au inferred) *Press Release*: December 8

Midway Gold Corp.(40%) announced that recent drill results at the Spring Valley Project include 179.8-207.3 meters @ 0.79 gpt Au (SV11-525); 172.2-178.3 meters @ 4.97 gpt Au (SV11-530); 85.3-96.0 meters @ 1.44 gpt Au (SV11-532C) and 89.9-112.8 meters @ 0.55 gpt Au (SV11-539C). (resource = 145,100,000 tonnes @ 0.48 gpt Au measured+indicated) *Press Release*: December 6

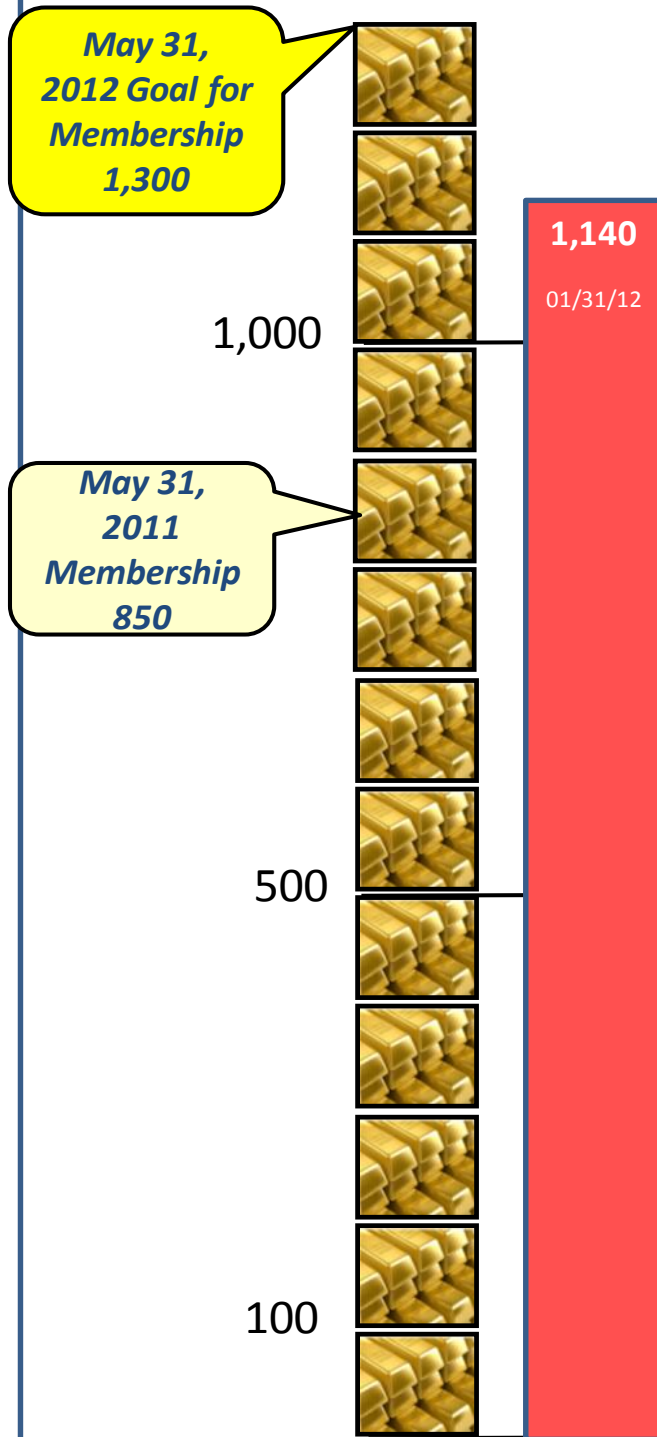
Gunpoint Exploration Ltd. announced that recent drill results at the Talapoosa Project include 116.43-223.42 meters @ 1.24 gpt Au, 8.6 gpt Ag (GT1-01); 101.19-161.54 meters @ 1.15 gpt Au, 19.1 gpt Ag (GT1-02); 115.82-180.44 meters @ 1.38 gpt Au, 15.3 gpt Ag (GT1-03) and 76.5-110.64 meters @ 1.10 gpt Au, 10.0 gpt Ag (GT1-04). (resource = 20,955,000 tonnes @ 0.92 gpt Au, 12 gpt Ag measured+indicated) *Press Release*: December 15

Allied Nevada Gold Corp. announced that recent drill results at the Hasbrouck Project include 229-284 meters @ 0.70 gpt Au, 12 gpt Ag (HSB11-099); 50-221 meters @ 1.10 gpt Au, 33.5 gpt Ag (HSB11-107) and 44-209 meters @ 0.80 gpt Au, 19.1 gpt Ag (HSB11-115). (resource = 18,400,000 tonnes @ 0.78 gpt Au, 11 gpt Ag indicated) *Press Release*: December 13

**Thanks to
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for sponsoring the
Elko Chapter meeting in January!**

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Goal for 2012



Geological Society of Nevada Membership Drive

THANK YOU EVERYONE FOR
MAKING OUR 2012
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SUCCESS! WE ALREADY HAVE
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LAST FISCAL YEAR!!

- Monthly Dinners & Speakers
- Networking/contacts
- Newsletters: 10 per year
- Fall and Spring Field Trips



Your 2012 G.S.N. Membership
Directory is at the Printer!!!

Geological Society of Nevada

**Membership
Directory**



- ⇒ **Look for an email regarding details of a Directory Pick-Up Party in Reno this month**
- ⇒ **The Directories will also be available for pick-up at the Reno Membership Meeting on Feb. 17, 2012**
- ⇒ **For those who can't pick them up, we will get them shipped by the end of February**



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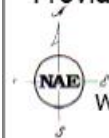
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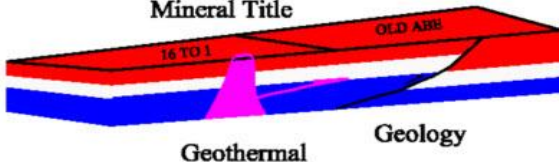
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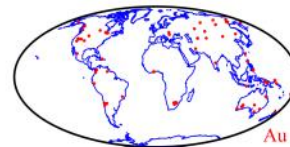


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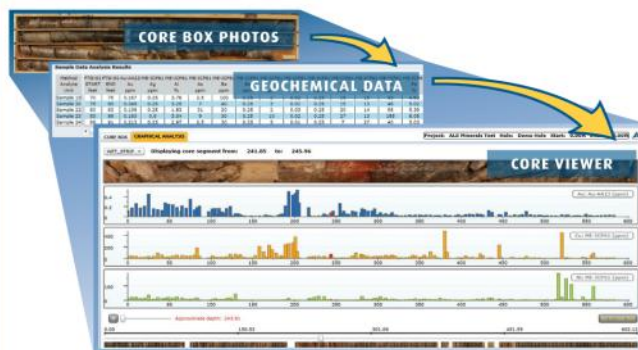
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