# **GSN NEWSLETTER**

Geological Society of Nevada, PO Box 13375, Reno, NV 89507 USA, 775/323-3500, www.gsnv.org Office location: Laxalt Mineral Research Center, Rm 266, UNR. Hours: Mon thru Fri, 1-4 pm



asn@mines.unr.edu

### Published monthly except June and July

PRESIDENT Ellie Davie Leavitt	CALENDAR OF GSN EVENTS		
Consultant zoracdavie@aol.com	May 5 Saturday	WINNEMUCCA CHAPTER FIELD TRIP – Leave Winnemucca BLM office parking lot at 7 am, 1 <sup>st</sup> stop at Tungsten, tour by the Energy Metals.	
VICE PRESIDENT Gregory Hill Harvest Gold Corp. (US) hillgreg@charter.net		2 <sup>nd</sup> stop - Spring Valley, where the Midway Gold staff will give a poster and core session. Lunch will be provided. 3 <sup>rd</sup> stop - Unionville - brief history of the district and a walk to several old prospects and potentially to a fossil locality. Return to Winnemucca by 3 or 4 pm. A fee of \$20 per person will be requested. Bring your	
SECRETARY Leslie Olmstead Agnico-Eagle (USA) Limited lolmstead@agnico-eagle.com		hats, water, and a folding chair. If you plan on attending please RSVP by May 1st to: ivan.johnston@newmont.com or to john.marma@newmont.com.	
TREASURER Camille Prenn Mine Development Associates cami@mda.com	May 9 Wednesday	WINNEMUCCA CHAPTER MEETING – Speaker: Dave Caldwell, President & COO, Golden Phoenix Minerals, Inc. Subject: Ashdown Mine. The Martin Hotel, W. Railroad and Melarkey Streets. Drinks at 6:30 pm, talk at 7 pm. Contact Ivan Johnston, Chapter President, for more info, 775/635-4292,	
MEMBERSHIP CO-CHAIRS Greg McN. French		Ivan.Johnston@Newmont.com. BAR SPONSOR – Humboldt Drilling Company.	
Consulting Geologist GMcNFrench@aol.com	May 17 Thursday	ELKO CHAPTER MEETING: Speaker: Ken Krahulec, Metals Geologist, Utah Geological Survey. Title: "Sediment-Hosted Gold and Silver Deposits of the	
Opal Adams Enviroscientists, Inc. ofadams@enviroincus.com		Eastern Great Basin, Utah". Western Folklife Center, 501 Railroad Street, Elko, NV. Drinks at 6:00 pm, talk at 7:00 pm. Contact Richard Reid, Chapter President, at 775/778-3912, Richard.Reid@newmont.com for more information.	
PUBLICATION CO-CHAIRS Marilyn Miller Consulting Geologist marilyn.miller1@sbcglobal.net	May 18 Friday	GSN MEMBERSHIP MEETING: Speaker: Steve Castor, Geologist, NV Bureau of Mines and Geology and Dennis Bryan, Mactec. Title: "Industrial Minerals in	
Debbie Schneider Schneider and Schneider Assoc dschneider41@charter.net	гпцау	Nevada – Who Gives a Rat's Ass? or What to Do the Next Time Metal Prices Crash – A Tribute to Keith Papke". Reno Elks Lodge, 597 Kumle Ln, Reno, NV. Drinks at 6 pm, dinner at 7 pm (\$17), talk at 8 pm. Contact Laura Ruud for	
		reservations, 775/323-3500, gsn@mines.unr.edu.	

SOUTHERN NEVADA CHAPTER — Meetings are over for the summer!

## **FROM THE PRESIDENT**

Ellie Davie Leavitt, GSN President 2006-2007

Here it is, the last newsletter deadline and a blank page - a reminder that when I began official duties with GSN, first as Vice President, the future was just as blank. During the recent renaissance in metal prices, some of you have reconnected - after down cycles in the industry, or modified career paths; others are new to GSN. Many of you have been faithful regulars, attending the third Friday night of the month meetings for years. My naivety of most things GSN meant I had little idea of what the VP and President positions required. After a first Executive Committee meeting (not yet an official EC member, but unofficially committed), still I wondered what I'd gotten into - kind of a déjà vu. Nonetheless, 2+ years later, here is the outgoing president's message. This has been a challenging, rewarding, and fun experience. As many of you know, volunteer jobs give back more than you give, and the more you give, the greater the return. So get involved even if just to volunteer yourself socially. If you aren't already, attend the meetings,



stay for dinner, listen to the talks, and before you know it you'll find yourself helping with field trips, social events, sponsorship, and more. GSN is a fun way to stay in touch



### FROM THE PRESIDENT continued from page 1

with others of like mind – an interest in geology and earth science. GSN remains an outstanding and dynamic organization that gives back at least as much as we give.

The increased membership and participation by students this year has breathed new life into the monthly membership meetings. GSN members have promoted this surge of vitality with ongoing financial support of the student dinner fund, and of student memberships by Lance Taylor and Geotemps. In turn, students have attended meetings in record numbers; participation in the February student poster contest was outstanding. The April talk by Sooz DeYoung was a great culmination of this banner year of student membership and participation. Her talk was polished, exceptionally well delivered, and described a topic that effects all of us working in the Great Basin - the crust! Everyone that attended was buzzing with excitement and enthusiasm afterwards. Mackav has produced an outstanding MS graduate, one that helps keep UNR and the Great Basin on the radar. Many thanks to Sooz; we wish her continued success in her future endeavors. Hopefully, GSN will continue to provide opportunities for students to participate in the organization, and showcase their work. Many thanks to Inspectorate who was the bar sponsor for the April meeting.

The Spring Field Trip was a success, and led geologists into areas with limited access – the Test site – and rarely visited, at least from here – the Searchlight district. The trip went almost without a hitch, and the new field trip guidebook (SP-45) includes articles on Yucca Mountain, the NV Test Site and the Searchlight district. Thanks to Greg Hill for putting all of this together. May's membership meeting will sponsor a tribute to Keith Papke, and focus on industrial minerals in Nevada with a talk by Steve Castor (see abstract). GSN will provide the venue for a silent auction that will raise funds for the newly established Keith Papke endowment to benefit the NBMG. This summer stay posted via the website for news of upcoming events including the golf tournament, Silver Summer series, and chapter talks and field trips.

As GSN enters its second 50 years, the challenge to maintain its present membership numbers through future metal cycles can be met with diversification. One way is to attract geologists and earth scientists interested in topics other than gold. Another is to advertise GSN's presence globally. Many of you are working overseas; we would love to hear more from you. GSN publications are a way to spread the word about our organization, the geology of Nevada, and our symposiums. The next symposium (2010) is little more than a twinkle in GSN's eye; look for more announcements of planning sessions and don't be shy, join in. Now is the time to make it what you want. Past symposium volumes still are available, and the 1990 set is free to members. We need you globe trotters (and otherwise) to help out GSN by volunteering to donate and transport these

materials to your countries and institutions of choice! (see article, this issue).

Lastly, please join me in thanking the Executive Committee who runs this organization. Special thanks and acknowledgment of 9 years of dedicated service go to Greg McN. French, retiring from Membership Chair. Let's heartily welcome and thank newly elected officers: Marcus Johnston, Vice President (new recruit), Greg Hill, President, Leslie Olmstead, Secretary, Cami Prenn, Treasurer, Opal Adams, Membership, and Marilyn Miller and Debbie Schneider, Publications Co-chairs (returning officers). Kudos go to outgoing and incoming GSN Chapter officers, too many to include here, but please look at the list of officers who were elected for the 2007-2008 membership year last month. The website continues to evolve, many thanks to Don Avery who has done a great job with help from Debbie Schneider. Lastly, Laura Ruud, thank you for your steady and consistent presence as Office Manager; not only do you keep the organization operating, but most often you are the welcoming voice and face of GSN. Thank all of you for a great couple of years.

## DOUG SILVER SUMMER SERIES – AUGUST 23, 2007

By Clancy Wendt

"Oh my goodness have you heard? Doug Silver is here on the 23<sup>rd</sup> of August that is".

Please come to the continuing Silver Summer Series. The event will be held at Opal Adams and Rich DeLong's house in Reno so mark your calendars now! Directions, Requirements for Food, Time and Topic will be forthcoming in a future announcement. All are welcome and a good time will be had by all.

## SAIWI UPDATE - MAY 2007

The Student Association for International Water Issues (SAIWI) seeks to provide a forum that fosters communication, enhances the dissemination of related information, and encourages the proper development of water resources primarily in underprivileged, developing nations where a great need exists for potable water supplies. SAIWI's largest annual fundraiser, the African Dinner, was held on April 14 and was successful enough to cover the costs of sending five students to Kenya and Uganda this summer to drill potable water wells. For more information and other fundraising updates, visit www.saiwi.org.

Thanks to INSPECTORATE for hosting the April meeting.

## GSN May 18, 2007 Membership Meeting

Date: Friday, May 18, 2007 Time: Social-6:00, Dinner-7:00 (\$17), Meeting-8:00 Reservations: 775/323-3500; fax 323-3599, e-mail gsn@mines.unr.edu

Deadline: Reserve by 1 pm Thursday, May 17th

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:** Stephen B. Castor and Dennis P. Bryan. See abstract below.

### INDUSTRIAL MINERALS IN NEVADA – WHO GIVES A RAT'S ASS? or WHAT TO DO THE NEXT TIME METAL PRICES CRASH – A TRIBUTE TO KEITH PAPKE

Stephen B. Castor, Nevada Bureau of Mines and Geology, and Dennis P. Bryan, MACTEC Engineering and Consulting

The main title of this abstract is a more-or-less direct quote from Keith Papke in 2002. This is about as profane as Keith ever got – he was a real gentleman and a straight shooter. Unfortunately Keith passed away in 2006. He was generally considered the Nevada guru of industrial minerals. Keith worked as the industrial minerals geologist for the Nevada Bureau of Mines and Geology (NBMG) for twenty years. This was followed by a twenty-year career as an industrial minerals consultant. Prior to joining NBMG, Keith worked for several mining firms, including Phelps Dodge and ASARCO. While at NBMG, Keith published prolifically. Some of his more notable publications include those on Nevada barite, gypsum, clays, evaporites and brines, talc, fluorspar, and zeolites. He was also the author of Mining Claim Procedures for Nevada Prospectors and Miners and was an editor for SME's recently completed 7<sup>th</sup> Edition of Industrial Minerals & Rocks. We offer a discussion about industrial minerals in Nevada as a tribute to Keith.

Industrial mineral mining clearly takes a back seat to precious metals mining in Nevada. However, industrial mineral commodities don't have the wild mood swings in terms of prices that metals do. Industrial minerals just plug along under most everyone's radar (with the possible exception of clay mining near Reno). Everybody uses industrial minerals but many people don't know much about them, including most economic geologists.

Industrial minerals are supposed to consist of those commodities that are not used in metallic form. Some exceptions appear to be metals like the rare earths, beryllium, lithium, and magnesium. This is probably because most economic geologists can't pronounce the names of the rare earths and so refuse to deal with them. The other metals may be too light to be taken seriously, who knows?

Most of the mineral wealth in the US comes from industrial mineral deposits (Nevada and Arizona are exceptions). Despite this, industrial minerals companies don't hire very many geologists. This is unfortunate – everybody knows that you can't have too many geologists around. One international company does have an industrial minerals exploration staff, but this company is so large that upper management probably doesn't know that it exists. It typically takes only one geologist to handle all of the deposits for an industrial mineral company and do all of its exploration as well. In addition, there are a few industrial minerals consultants who make out like bandits because most geologists alternate between looking for gold and working at Home Depot. There are also some junior companies that deal in industrial mineral commodities and they are just as wild and crazy as their metallic brothers.

Industrial mineral deposits in Nevada occur in industrial mineral trends. They are the Carson City – Lovelock – Battle Mountain – Wendover trend, the Amargosa – Silver Peak – Basalt – Gabbs – Fallon trend, and the Las Vegas – Overton trend. Unlike precious metal trends, such as the Carlin and Battle Mountain – Eureka trends, which are linear and really sort of boring, the industrial mineral trends are very complex and appear to wander around the state aimlessly. We are not sure why this is; maybe they are controlled by some as yet unknown irregular deep crustal structures.

Another important factor in any discussion about industrial minerals is that most productive deposits are near major roads. This may be because industrial mineral geologists are lazy and don't like to walk around much, but we think that it's because they spend too much time on the road between their employers' far-flung deposits. At any rate, this correlation can clearly be used as an exploration tool.

The authors have a combined fifty years of experience in industrial minerals. Come to the May 18 presentation and you will learn all that you could have ever wanted to know about industrial minerals in Nevada. We will bare all! Don't get worried, this will not be a Full Monty-type exposure, but more of a highly informational (but not very technical) discourse. If the audience is particularly attentive, they may get to witness the secret industrial minerals geologist handshake.

Oh, and there will be a silent auction of some of Keith's secret publications and paraphernalia.

## 

The GSN annual golf tournament is scheduled for Saturday, June 23, 2007 at Washoe County Golf course. A 1:00 PM shotgun start is planned, with a barbeque to follow. **Eklund Drilling** has once again generously offered to sponsor the event, and as in the past, *there will be no charge for the golf and the barbeque this year, as Lance has agreed to cover all costs*! We can accommodate only 144 golfers, so sign up early! Deadline for registration is Friday, June 15<sup>th</sup>. You may call (775-323-3500), fax (775-323-3599) or email (gsn@mines.unr.edu) Laura at the GSN office to sign up individually, or as a foursome. Please provide the following information for each golfer.

Registra	ation Form	
Name:	Ave. score:	
Address:		
Phone:		
Teamed with:		
BBQ Guest Name(s):		
SPONSORED BY EKLUND D	ORILLING COMPANY, INC.	

## **ELECTED GSN OFFICERS FOR 2007–2008**

### GSN Mothership Executive Committee Officers 2007-2000

President, Greg Hill Vice President, Marcus Johnston Secretary, Leslie Olmstead Treasurer, Camille Prenn Membership Chair, Opal Adams Publications Co-Chair, Marilyn Miller Publications Co-Chair, Debbie Schneider

### Winnemucca Chapter Officers 2007-2008

President, Jon Carlson Vice President, John Marma Secretary, Karl Marlowe Treasurer, Randy Vance

### Elko Chapter Officers 2007-2008

President, Nancy Richter Vice President, Moira Smith Secretary, Carrie Bruno Membership Chair, Jay Olcott Treasurer, Richard Yancey

### Southern Nevada Chapter Officers 2007-2008

President, Bruce Hurley Vice President, Jean Cline Secretary, Kathleen Wooton Treasurer, Charles Riecken Newsletter, Lora Griffin Website, Robyn Howley

### **GSN Board of Directors 2007-2008**

GSN President, Greg Hill Recent Past President, Ellie Leavitt Elko Chapter President, Nancy Richter Southern Nevada Chapter President, Bruce Hurley Winnemucca Chapter President, Jon Carlson Class A Board Member, Fred Breit (2006-2009) Class A Board Member, Steve Green (2006-2009) Class B Board Member, David Caldwell (2007-2010 newly elected) Class B Board Member, Dieter Krewedl (2007-2010 newly elected)

Class C Board Member, Richard DeLong (2005-2008) Class C Board Member, David Shaddrick (2005-2008)

### PAID ADVERTISEMENTS

## RVICIOS HIDROG

Dirk Masuch Oesterreich (Geologist, Proprietor) A.P. 107: Carretera a Galeana, km. 4 Linares, Nuevo León, México, C.P. 67700 Tel.: +52 821 212 5908, +52 821 212 8311 www.servicioshidrogis.com



Please ask for our maps and GIS database of stock exchange listed mining companies in Nevada info@servicioshidrogis.com



Providing Drilling Services To The Mining/Metals Industry Since 1980

3650 Grant Creek Road Missoula, Montana 59808 Phone: (406) 542-1010 Fax: (406) 542-5065 www.diversifieddrilling.com

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

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

E-mail: AALADMIN@aallabs.net



## **Carlin Trend Mining** Supplies & Service

www.carlintrend.com

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

Geological Consulting - Claim Staking - Soil Sampling Geology & Drafting Supplies - AutoCad & GIS Temporary Employees In All Fields

## **Big Sky Geophysics**

Clark Jorgensen, M.Sc. Geophysicist

P.O. Box 353 Bozeman, MT 59771 USA

Field Work Processing **Interpretations** 

Phone: (406) 587-6330 Fax: (406) 587-6394 Mobile: (406) 580-9718 clark@bigskygeo.com

For more details, my background, and case studies, visit my webpage at www.bigskygeo.com

# S CGS Personnel™

DIXIE BULLOCK DISTRICT MANAGER

WILMA HATTER SERVICE REPRESENTATIVE HATTERW@SOSSTAFFING.COM

390 East Moana Ln., Ste. 2 RENO, NV 89502 T. 775.331.5227 F. 775.323.7772 WWW.SOSSTAFFING.COM

A Division of SOS Staffing Services, Inc.

## **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

### PAID ADVERTISEMENTS

## ALS Chemex

We are a global analytical testing company serving the mining and mineral exploration industry in Nevada and around the world.

### We specialise in:

Assaying and geochemical analysis for mining and mineral exploration projects

- On-site contract mine laboratory management
- · Environmental monitoring of mining operations
- Acid mine drainage studies

Contact our laboratories in Nevada to find out how we can help you with all of your project's analytical needs.

### **RENO, NV** Phone: 775 356 5395

**ELKO, NV** Phone: 775 738 2054

#### WINNEMUCCA, NV Phone: 775 625 4192

### www.alschemex.com

Right solutions.... ....Right partner

### HOWARD J. ADAMS President

## HARD ROCK WHEELS, INC.

4WD Pickup Rentals

14756 Pine Knolls Ln Reno, Nevada 89521 (775) 852-2622 Fax (775) 852-2075 MIKE TOLBERT 2700 S. Cushman St. Fairbanks, AK 99701 (907) 452-6631



Cell: (970) **260–0293** Fax: (970) 241–9523 Email: Lappins@earthlink.net

2830 North Ave., C5B #164 Grand Junction, CO 81501

# **GIS Land Services**

Greg Ekins M.S. R.L.P. #32306 President Mineral Landman - GIS Cartographer



### "From Courthouse Records to Final Map"

- Land Status Maps
- Geologic
- Geo Chem



- AutoCad Map
- Arc Map
- Mapinfo
- Discover
- Power Point

5365 Mae Anne Ave B-14A Reno, NV 89523 P:775-746-8803 P:775-746-2110 F:775-746-8802 E:greg@gislandservices.com

www.gislandservices.com

# 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 email: info@Lmine.com

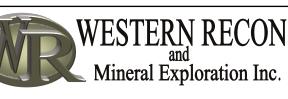


Info@enviroincus.com

### PAID ADVERTISEMENTS

### JOSEPH R. ANZMAN Exploration Geophysicist • consulting • interpretation • project management • geophysical surveys • domestic & foreign

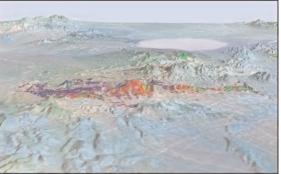
P.O. Box 370526 Denver, Colorado 80237 303-337-4559 telephone/fax



**Claim Staking / Soil Sampling / Grids Experienced / Dependable/ Trimble GPS** Gary Castagne 775-250-4879 John Fernandez 775-815-2587

## www.westernrecon.com

## **EXPLORATION** with ASTER



Alteration Image, Goldfield, Nevada

- CUSTOM CORRECTED DATA
- ALTERATION IMAGERY
- EXTENSIVE GLOBAL ARCHIVES

WWW.ASTERIMAGES.COM email: pusa@rmi.net dwc@overhill-imaging.com

# **RENT A PIMA!!**



IDENTIFY and MAP ALTERATION MINERALS IN THE FIELD and CORE CONTACT US FOR Rentals and Services

Spectral International, Inc 303 403 8383 pusa@rmi.net www.specmin.com

## **TSX INFORMATION LUNCHEON - MAY 17, 2007**

TSX Group is the world leading market for resource equities and small to mid cap public companies. More and more U.S. companies are looking to Toronto Stock Exchange and TSX Venture Exchange for the capital they need to succeed. TSX Group is home to almost 60% of the world's public mining companies, almost 50% of the world's energy companies, and second in the world by number of listed technology companies. Learn more about why TSX Group may be a capital opportunity for your company. Attend the TSX Group Information luncheon and workshop in Reno on May 17, 2007. Go to http://www.tsx.com/usa/ for more information and to register.

### **Reno TSX Roadshow**

Thursday, May 17 Keynote Luncheon: 12:00 pm-1:30 pm

John Ascuaga's Nugget Casino Resort, 1100 Nugget Avenue

### Luncheon Program:

- TSX Group Overview
- US Listed Company Presentation

Cost: US\$35

# $\begin{array}{l} \text{Denver} \rightarrow \text{May 15} \\ \text{Houston} \rightarrow \text{June TBA} \\ \text{Reno} \rightarrow \text{May 17} \\ \text{Dallas} \rightarrow \text{June TBA} \end{array}$

## ACTIVITY UPDATE

Mike Brady, March 2007 www.activityupdate.com

### <u>NEVADA</u>

Fortune River Resources Corp. announced it acquired an option to earn a 100% interest in the Wind Mountain Property from private interests for escalating advance royalty payments and \$2,000,000 in exploration expenditures over 6 years.

Press Release: February 28

Coral Gold Resources Ltd. announced recent drill results at the Robertson/39A Project include 280-345 feet @ 0.031 opt Au (CR06-24); 360-390 feet @ 0.027 opt Au (CR06-24); 345-370 feet @ 0.028 opt Au (CR06-25); 395-415 feet @ 0.024 opt Au (CR06-25); 345-370 feet @ 0.026 opt Au (CR06-26); 785-905 feet @ 0.065 opt Au (CR06-26); 245-270 feet @ 0.017 opt Au (CR06-27); 315-355 feet @ 0.039 opt Au (CR06-28) and 465-495 feet @ 0.025 opt Au (CR06-28). (resource = 10,200,000 tons @ 0.044 opt Au measured+indicated) Press Release: February 5

Coral Gold Resources Ltd. announced recent drill results at the Robertson/Altenburg Hill Project include 95-235 feet (@ 0.040 opt Au (CR06-30); 75-125 feet (@ 0.021 opt Au (CR06-34); 55-175 feet (@ 0.014 opt Au (CR06-35); 30-125 feet (@ 0.015 opt Au (CR06-36) and 140-285 feet (@ 0.028 opt Au (CR06-37). (resource = 3,500,000 tons (@ 0.018 opt Au inferred)

Press Release: February 5

Miranda Gold Corp. announced recent drill results at the Red Hills Project (from partner Barrick Gold Corp.) included holes BRH-014 and BRH-015 that were designed as 200-300 foot offsets to previous hole BRH-013 (1,920-2,000 feet @ 0.146 opt Au). Barrick stated that neither hole intersected significant gold mineralization.

Press Release: March 9

Cyprus Development Corp.(73.13%) announced it would complete an additional 12,000 feet of diamond drilling at the Gunman Zinc Project during 2007. *Press Release:* March 8

Barrick Gold Corp.(60%) announced construction at the Cortez Hills Project would begin once all permits are received now estimated in 2008. Capital cost estimates remain at \$490,000,000 for project development to produce 440,000 ounces/year gold. (reserve = 41,250,000 tons @ 0.097 opt Au proven) *M.J.:* March 2

Newmont Mining Corp. announced the Phoenix Project commenced commercial production on October 1, 2006 followed by the Leeville Project on October 14, 2006. Mining operations were also completed at the Lone Tree Mine although leaching will continue for some time. (reserve @ Phoenix = 174,177,000 tons @ 0.034 opt Au, 0.32 opt Ag, 0.17% Cu proven+probable)

M.R.: March 2007

Great Basin Gold Ltd. announced the originally planned underground drilling of 55,000 feet at the Hollister Development Block Project is now complete. An additional 53,000 feet is now planned to provide additional in-fill results. (resource = 717,200 tons @ 1.295 opt Au, 7.03 opt Ag inferred)

Press Release: March 22

Copper Canyon Corp. announced it completed the acquisition of a 100% interest in the New York Canyon Project from Nevada Sunrise LLC by paying \$250,000 cash and 500,000 shares. (resource @ Longshot Ridge = 16,100,000 tons @ 0.55% Cu) *Press Release:* March 22

Boxxer Gold Corp. announced recent drill results at the Buena Vista Project include 310.5-338 feet @ 0.05% Cu (BV06-1); 16-38.5 feet @ 0.06% Cu (BV07-2) and 237.7-241.9 feet @ 0.13% Cu (BV07-3).

Press Release: March 5

Global Minerals Ltd. announced it acquired an option to earn a 100% interest in the Granite Peak Property from Altair Minerals Ltd. for \$70,000 cash and 750,000 shares over 3 years.

Press Release: March 15

Fury Explorations Ltd. announced recent drill results at the Taylor Project include 0-105 feet @ 2.28 opt Ag (FT3-C); 153-173 feet @ 3.07 opt Ag (FT4-C); 140-150 feet @ 2.68 opt Ag (FT6-C); 12-51 feet @ 3.00 opt Ag (FT14-C); 45-85 feet @ 2.93 opt Ag (FT-19); 65-95 feet @ 3.71 opt Ag (FT-20) and 75-110 feet @ 1.56 opt Ag (FT-22). (resource = 5,940,000 tons @ 2.72 opt Ag, 0.01 opt Au measured) Press Release: February 6

Gold Canyon Resources Inc. announced recent drill results at the Cordero/North Bradley Project include 10-115 feet @ 35.5 g/t Ga (C135); 50-110 feet @ 33.2 g/t Ga (C136); 10-80 feet @ 41.1 g/t Ga (C137); 10-150 feet @ 49.9 g/t Ga (C138) and 10-175 feet @ 38.1 g/t Ga (C140). Press Release: March 14

NewWest Gold Corp. announced recent drill results at the Sandman/Abel Knoll Project include 330-430 feet @ 0.039 opt Au (AK06-4); 170-175 feet @ 0.055 opt Au (AK06-11); 550-700 feet @ 0.031 opt Au (AK06-14); 340-380 feet @ 0.080 opt Au (AK06-15); 135-460 feet @ 0.035 opt Au (AK06-18) and 160-405 feet @ 0.030 opt Au (AK06-19). Press Release: March 5

NewWest Gold Corp.(40%) announced recent drill results at the Northumberland Project include 1,725-1,755 feet @ 0.246 opt Au (NUN-82C); 1,650-1,660 feet @ 0.448 opt Au (NUN-83C) and 1,455-1,475 feet @ 0.287 opt Au (NN-85). (resource = 30,800,000 tons @ 0.068 opt Au measured+indicated)

Press Release: March 19

U.S. Gold Corp. announced its shareholders approved the resolution to acquire White Knight Resources Ltd., Nevada Pacific Gold Ltd. and Tone Resources Ltd. *Press Release:* March 16

X-Cal Resources Ltd. announced recent drill results at the Sleeper/Facilities Area Project include 75-120 feet @ 0.012 opt Au (XR07-15); 150-205 feet @ 0.011 opt Au (XR07-16); 125-215 feet @ 0.026 opt Au (XR07-12); 61.5-81.8 feet @ 0.022 opt Au (XC06-02) and 145-280 feet @ 0.020 opt Au (XC06-03).

Press Release: March 8

Barrick Gold Corp. announced start-up of operations at the Ruby Hill Mine to produce 120,000 ounces/year gold. (reserve = 19,470,000 tons @ 0.055 opt Au proven+probable)

## ELKO CHAPTER MAY 17<sup>th</sup> MEETING

### SEDIMENT-HOSTED GOLD AND SILVER DEPOSITS OF THE EASTERN GREAT BASIN, UTAH

Ken Krahulec, Metals Geologist, Utah Geological Survey

The Great Basin of western Utah hosts numerous sediment-hosted gold and silver deposits. Host rocks range in age from Proterozoic to Eocene, but the most important deposits are hosted by either Mississippian or Permian strata. The known or suspected age of mineralization for the deposits ranges from about 153 to 13 Ma, but cluster in the late Eocene to early Miocene (40 to 24 Ma) range.

The sediment-hosted gold and silver deposits are classified into three categories based on their gold to silver ratio: (1) silver-dominant [Au:Ag < 0.01], (2) gold-silver subequal [Au:Ag 0.01 to 3.0], and (3) gold-dominant [Au:Ag >3.0]. The silver-dominant deposits (1) appear to represent the distal, outer fringe of lead-zinc replacement mineralization. The Vipont deposit in the Ashbrook district, of extreme northwestern Utah, is an example of the silver-dominant class (about 430,000 tons @ 0.49 ppm Au and 173.5 ppm Ag resource). These deposits are typically less than 4 km from the inferred, causative intrusive center. The silverdominant deposits average about 1:67 Au:Ag and typically have associated Pb and/or Zn geochemical anomalies.

The sediment-hosted deposits with subequal gold-silver (2) are represented by the Goldstrike mine in the Goldstrike mining district of southwestern Utah (6.8 million tons @ 1 ppm Au and 1 ppm Ag produced). These deposits are approximately representative of the distal disseminated class of deposits (USGS model 19c). These deposits average slightly over 5 km from the inferred, causative intrusive. The deposits average about 1:1.8 Au:Ag and generally have geochemical As, Sb, and often have elevated Te, Mo, and or Sn.

The final type of sediment-hosted gold-silver ore bodies are the gold-dominant deposits, which are commonly termed Carlin-type deposits (USGS model 26a). These deposits average nearly 10 km from the suspected, intrusive center, have Au:Ag of over 6.4:1, and in addition to geochemical As and Sb, always have associated thallium.

The largest gold-dominant sediment-hosted deposit in Utah is the Mercur mine in the southwestern Oquirrh Mountains. Production of silver-rich ores at Mercur began in 1871 followed by gold ores in the early 1890s. Mercur possibly had the earliest production of gold ore using the cyanide process in the western U.S. and the first exploitation of disseminated (Carlin-type) gold ore in the world. The mine ultimately produced over 41 million tons averaging about 2.88 ppm gold and 0.98 ppm silver for a total of nearly 3.5 million contained ounces of gold. Mineralization is localized just above the axial plane of a large, northwesttrending, thrust-cored, box-fold anticline at the intersection with a series of east-northeast-trending, high-angle faults. The deposits are stratabound in the 240-foot thick, clastic carbonate, the Mercur Member of the Mississippian Great Blue Formation. Mineralization is related to argillic alteration with minor silicification and carbonaceous mobilization. Micron-size gold is associated with arsenian pyrite, marcasite, orpiment, realgar, stibnite, cinnabar, and a variety of thallium minerals. Mineralization appears to be related to the 31.6 Ma Eagle Hill Rhyolite (Mako, 1999).

## **UPCOMING EVENTS**

**May 1, Tuesday** – Arizona Geological Society Dinner Meeting. Mary Poulton, Univ of Arizona. Talk: "Pattern Recognition Technologies in the Minerals Sector". Inn Suites Hotel: 475 N. Granada Ave, Tucson, AZ. Call 520/663-5295 for reservations.

**May 3, Thursday** – NV Petroleum Society. Speaker: Don French, Independent Geologist, Billings, MT. Title: "Tertiary-Age Landslide Deposits of the Basin-Range: How Everything is Just Like Grant Canyon Field". Austin's Restaurant, 7671 So. Virginia St, Reno, cocktails at 6:30 pm. Dinner at 7:00 pm (\$17/members; \$19/non-members, \$10/students). RSVP by noon Tues, Apr. 3 to Diane Phillips 775/267-4663 or trailsend@pyramid.net Reservations required.

**May 4, Friday** – Mackay Seminar in Economic Geology. Speaker: John Muntean, NV Bureau of Mines & Geology. Mackay School of Earth Sciences and Engineering, "The Turquoise Ridge Gold Deposit". Laxalt Mineral Research Bldg, Room 353, University of NV, Reno.

**May 5, Saturday** – WINNEMUCCA CHAPTER FIELD TRIP – Leave Winnemucca BLM office parking lot at 7 am, 1<sup>st</sup> stop at Tungsten, tour by the Energy Metals. 2<sup>nd</sup> stop - Spring Valley, where the Midway Gold staff will give a poster and core session. Lunch will be provided. 3<sup>rd</sup> stop - Unionville - brief history of the district and a walking tour. Return to Winnemucca by 3 or 4 pm. \$20 per person will be requested. Bring your hats, water, and a folding chair. **To attend, RSVP by May 1<sup>st</sup> to:** ivan.johnston@newmont.com or to john.marma@newmont.com.

May 9, Wednesday – WINNEMUCCA CHAPTER MEETING. Speaker: Dave Caldwell, President & COO, Golden Phoenix Minerals, Inc. Subject: Ashdown Mine. The Martin Hotel, W. Railroad and Melarkey Streets. Drinks at 6:30 pm, talk at 7 pm. Contact Ivan Johnston, Chapter President, for more info, 775/635-4292, Ivan.Johnston@Newmont.com.

**May 14-16** – Nevada Geographic Information Society's 17<sup>th</sup> Annual Conference, Harvey's, Lake Tahoe, NV. www.ngis.org for information.

**May 16, Wednesday** – AIPG Spring Dinner. Speaker: Paul van Eeden, gold market analyst. Title: "How Does China Affect World Gold Prices? An Insider's Perspective." Skyline Room, Holiday Inn, 1000 East 6<sup>th</sup> St, Reno. Hosted cocktails at 6:00 pm. Dinner at 7:00 pm (\$30/person, \$5/students). RSVP by 5:00 pm, May 11, to Ron Parratt 775/337-1545 or (ronparratt@aol.com). Reservations required.

May 17, Thursday – ELKO CHAPTER MEETING. Speaker: Ken Krahulec, Metals Geologist, Utah Geological Survey. Title: "Sediment-Hosted Gold and Silver Deposits of the Eastern Great Basin, Utah". Western Folklife Center, 501 Railroad St, Elko, NV. Drinks at 6:00 pm, talk at 7:00 pm. Contact Richard Reid, Chapter President, at 775/778-3912, Richard.Reid@newmont.com for more information.

May 17, Thursday – TSX Information Luncheon, John Ascuaga's Nugget, Sparks, NV. Noon-1:30 pm. Cost-\$35. See www.tsx.com/usa/.

**May 18, Friday** – GSN MEMBERSHIP MEETING. Speakers: Dennis Bryan, Mactec and Steve Castor, NV Bureau of Mines and Geology. Title: "Industrial Minerals in Nevada – Who Gives a Rat's Ass? or What To Do The Next Time Metal Prices Crash – A Tribute to Keith Papke". Reno Elks Lodge, 597 Kumle Ln, Reno, NV. Drinks at 6 pm, dinner at 7 pm (\$17), talk at 8 pm. Contact Laura Ruud for reservations, 775/323-3500, gsn@mines.unr.edu.

**May 20-25** – 43<sup>rd</sup> Forum on the Geology of Industrial Minerals, Boulder, CO. Visit http://imforum2007.crmca.org for more info.

**June 23, Saturday** – GSN Golf Tournament sponsored by Eklund Drilling Company Inc. Washoe County Golf Course, Reno, NV. Shotgun start – 1:00 pm, BBQ to follow.

**Sept 24-30** – Arizona Geological Society - Ores & Orogenesis - Circum-Pacific Tectonics, Geologic Evolution, and Ore Deposits – a symposium in honor of William R. Dickinson. Full details on the symposium can be viewed at www.agssymposium.org/.

## GSN MEMBERS' PERSONAL NOTES & NEWS

### Announcements

▶ *Effective 3 April 2007 We are Moving!* Frank P. Fritz and Fritz Geophysics has moved from Fairplay, Colorado to Loveland, CO. New contact information: 560 Quillan Gulch Road, Loveland Colorado 80537, 970 593-1128 Office, 970 278-4043 Fax, E-mail fritz@fritzgeoph.com, Web www.fritzgeoph.com

▶ Nevada Division of Minerals has moved their Las Vegas office. Effective April 16, 2007 the Las Vegas Division of Minerals' new address will be: Bill Durbin – Chief, Southern Nevada Operations, Nevada Division of Minerals, 2030 E. Flamingo Road, Suite 220, Las Vegas, NV 89119. Phone, fax, and cell numbers and my e-mail address remain the same.

### Career Related Moves

▶ Carlin Trend Mining Services (Carlin Trend) announces that Sandi Sullivan and Tom Kuhl are taking over the daily management of the business. Current Coordinator, David Knight, has accepted a job to help start a new mineral exploration company. David Knight will remain a member of the Board of Directors, Secretary and Treasurer, and will be available to Carlin Trend for consultation when needed and will occasionally even help (or hinder) with the cash register for the retail sales of geological and mining supplies and discovery and science toys.

**Sandi Sullivan** and **Tom Kuhl**, combined, have more than 50 years of experience in the mining industry. Sandi has been Carlin Trend's Office Manager for more than 10 years and had worked previously in the survey departments of Round Mountain Gold and in the Witswatersrand while studying mining engineering at Montana Tech. Tom Kuhl has been doing exploration, developing mineral resources, and managing mineral exploration offices and crews in Nevada and the Western United States for over 35 years. Tom has experience in all aspects of mineral exploration from exploration to development. Tom's experience will be valuable directing Carlin Trend Mining Services' claim staking and soil sampling crews and project management division.

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 by the 21<sup>st</sup> of each month.

## FREE 1990 SYMPOSIUM PROCEEDINGS

In an effort to reduce inventory of the 1990 "Geology and Ore Deposits of the Great Basin" Symposium Proceedings, the GSN Executive Committee is offering free sets to CURRENT GSN MEMBERS. We encourage you to donate to your favorite University or Library worldwide. Sets may be picked up at GSN's office, or we will ship them to you anywhere in the U.S. for the price of \$13 (shipping & handling). Foreign members should contact the GSN office to ask about shipping costs to their country. The 1,267 page set weighs 10 lbs. and includes 51 full-length technical papers. Please contact Laura Ruud at the GSN office to reserve your set of 1990 Proceedings today. This offer is good while supplies last !!! We also encourage GSN members to purchase any of the many GSN publications currently available and donate them to your Alma Mater's Geoscience department or library.

## KEITH PAPKE SILENT AUCTION – MAY 18, 2007 AT GSN MEETING

Keith Papke was one of GSN's honorary/lifetime members who passed away last year. He was a longtime wellrespected geologist at the Nevada Bureau of Mines and Geology where he was a prolific producer of bulletins on the industrial minerals of Nevada. In conjunction with the Industrial Minerals talk by Dennis Bryan and Steve Castor this month, we will be having a small silent auction of some of Keith Papke's Industrial minerals books, rocks, minerals and memorabilia set up before the meeting, during drinks and ending about 7:30 pm. The proceeds will go entirely to the UNR Foundation's Keith Papke Memorial Endowment, which will generate interest to hire and support UNR students working at the Nevada Bureau of Mines and Geology, preferably on industrial minerals-related projects.

### American Institute of Professional Geologists— Nevada Section Spring Dinner

### May 16, 2007

Skyline Room, Holiday Inn, 1000 East 6th Street, Reno

Speaker—Paul van Eeden, Gold Market Analyst "How Does China Affect World Gold Prices? An Insider's Perspective"

6:00 p.m. Hosted Cocktails and Wine (compliments of GeoTemps, Inc.) 7:00 p.m. Dinner with Wine, 8:00 p.m. Program Door Prize: Decorative Globe (donated by Geotemps, Inc.) Cost: \$30 / \$5 for Students

Reservations: 775/337-1545 or e-mail: Ronparratt@aol.com No reservations accepted after Friday, May 11 @ 5:00 p.m. Please reserve early

## **GSN SPRING 2007 FIELD TRIP A GREAT SUCCESS**

By Greg Hill, GSN Vice President

The spring field trip was a great success with very enjoyable and interesting visits to the Nevada Test Site and the Searchlight district. Twenty participants attended the two day event and everyone seemed to have a great time. Although we were in Las Vegas for two nights, most of the excitement took place out of town.

On day one, Bruce Hurley, the GSN Southern Nevada Chapter President, arranged and led a wonderful trip to the Nevada Test Site. We traversed nearly the entire site and saw a wide variety of geology including a Tertiary caldera complex, Yucca Mountain, and Paleozoic sedimentary units. Brian Dozier of Los Alamos National Laboratory (and the GSN Southern Nevada Chapter) provided a very informative briefing on the repository project and current activities at Yucca. We also traveled through a couple of long forgotten mining districts: one hosting tungsten skarn and the other, a gold district. This geology provides a setting for the numerous nuclear tests that have been carried out at the NTS such as: nuclear

weapons testing, testing of nuclear powered rockets, and design and testing of plow share nuclear devices for large excavations. The NTS visit ended up at the USGS core library where we met Jerry Magner, who looks after the library. There, we reviewed the route we had taken and the geology of the NTS. Afterward, we had a nice relaxing dinner at Cozymel's in Las Vegas where Dave Shaddrick picked up the tab. Thanks Dave!

The following day, Haroldo Lledo and Jean Cline, both of UNLV, took us to the Searchlight district, south of Las Vegas. We had an interesting visit that included examinations of gold mineralization, a tilted pluton, and detachment faulting. This district is the subject of a significant amount of current research, much of which was discussed along the way. Examples are discussions of the introduction of more mafic magma into a felsic magma and the tilting and dissection of the Searchlight pluton. It's always great to let your imagination work with these kinds of problems, especially when you are standing on the subject outcrops. Thank you to ALS Chemex for providing drinks and snacks for the Searchlight day!

Thanks to all who participated as well as all of the field trip leaders for making another successful and enjoyable GSN field trip.



## 1st Annual Elko Gem and Mineral Show

September 15 & 16, 2007

## FEATURE EVENT: Premier offering of crystallized Malachite from a NEW Arizona locality

**Choice Specimens from Historical Arizona Mines** 

### Other Events:

- Book signings
- Mineral seminars for novice and advanced collectors

Elko Convention Center 700 Moren Way, Elko, Nevada

Booth Space Available Early-Bird Special- \$375 by June 1, 2007

- Contact: Cordilleran Gems & Minerals LLC c/o Carlin Trend Mining Services 369 Fifth Street Elko, Nevada 89801-3705 Telephone: 775-778-0668 FAX: 775-778-0687 elkogemandmineralshow@frontiernet.net
- Labs

## **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

