April 2001, Vol. 15, No. 4

CALENDAR OF EVENTS

Apr 4 GSN WINNEMUCCA CHAPTER MEETING: Red Lion Inn & Casino, Humboldt Room, Winnemucca, NV. Speaker – Randall Vance; title – “Regional geology, alteration, and exploration of Proterozoic-age (Cu-Au-Co-U) iron-oxide breccia bodies, Wernecke Mountains, north-central Yukon Territory, Canada.” 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.


Apr 20 GSN MEMBERSHIP MEETING: Reno Elks Lodge, Reno, NV. Speaker – Robert C. Hays, Jr., Cortez Gold Mines; title – “The Cortez Pediment Deposit, a recent discovery in an historic mining district, Lander County, Nevada.” Social-6:00 pm, dinner-7:00 pm ($17), talk-8:00 pm. Details on page 3. Call Laura Ruud, 775/323-3500.

Apr 26 GSN SOUTHERN NEVADA CHAPTER MEETING: Lily Fong Geoscience Bldg, UNLV, Las Vegas, NV. Student speakers – Joe Gilbert, UNLV, topic to be announced and Ilsa Schiefelbein, UNLV, title – “Fault Segmentation and Linkage Along the Sevier Fault, Southwestern UT.” Social-5:30 pm, talk-6:30 pm. Call Chris Riecken, 702/435-5664 for information.

May 2 GSN WINNEMUCCA CHAPTER MEETING: Red Lion Inn & Casino, Humboldt Room, Winnemucca, NV. Speaker – Tommy Thompson (tentative); topic 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.

May 3-6 GSN SPRING FIELD CONFERENCE, Battle Mountain, NV. REGISTER NOW! Call Laura Ruud @ 775/323-3500 or email gsn@mines.unr.edu for more information.

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, I wish to thank everyone who participated in last month’s meeting. Doug McGibbon’s update on exploration at Glamis Mines Inc.’s Marigold Mine was well received and made even more interesting by Bob Horton’s comments about his fathers activities in the late 1930s at the Old Marigold Mine. It was also good to see Vic Kral (another part of the Marigold consortium) in the audience. Over 100 members attended the meeting and were taken care of by our two gracious hosts, American Assay and CGS, Inc.

Next month is another meeting of interest to Nevada geologists. Bob Hays will give a presentation on Placer Dome’s new discovery near the historic Cortez mining camp. The Cortez Pediment Deposit is rather unique so mark your calendars. Sponsor for April’s meeting is Baroid Drilling Fluids.

The sign-up deadline for the Spring Field Conference is approaching. GSN is providing 2 FREE spaces for members who do not have corporate sponsors. We will hold a raffle at the April meeting so please attend or call Laura and let her know that you are interested in having your name included in the drawing.

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THE MAJOR GOLD TRENDS OF NORTHERN NEVADA
A Geological Society of Nevada Field Conference, May 3, 4, 5 and 6, 2001
Battle Mountain Civic Center, Battle Mountain Nevada

TENTATIVE PROGRAM

DAY ONE, Thursday, May 3, 2001
Regional Geologic Framework
Talks: 8 am - 4 pm with lunch and coffee breaks.
2. Gary Massingill: A Tertiary Tectonic Twist for Northern NV based on Isotopic Data
3. Steve Moore: Chronologic Limits of Fault Movement and Regional Structural Fabrics in the Carlin Trend Region: Current Interpretations and Limits of Uncertainties
4. John Muntean, Michael Coward, Charles Tarnocai, and Andrew Jackson: Styles and Reconstructions of Tertiary Extension in North-Central NV
5. Dick Tosdal: Building the structural architecture of the Carlin trend in the Paleozoic: evidence from the northern Pinon Range, NV
6. Chris Henry et al.: Timing and styles of Cenozoic extension near the Carlin trend: Implications for the formation of Carlin-type gold deposits
8. Alex Dewitt: Structural controls on gold mineralization of the Jerritt Canyon District, with emphasis on reactivation of compressional architecture

POSTERS (accompanied by pre-dinner social hour)
Pat Cashman: Upper Paleozoic Deformation Events in the Carlin Canyon Area, NV
Tom Westervelt: Fault Kinematics in Theory and Practice at the Carlin Mine
Richard Bedell: Geologic Mapping with the AST
Brian Cellura: Biostratigraphy And Structural Geology of the Roberts Mountain Allochthon, Marys Mountain, Southern Tuscarora Mountains, Eureka Co., NV
Craig Byington, to be announced

DAY TWO, Friday, May 4, 2001
Mine and Orebody-Scale Structural Controls:
Methods, Techniques and Tricks
Talks: 8:30 am to 5 pm with coffee breaks and lunch.
1. Steve Peters, Keynote speaker: The use of structural geology in exploration for and mining of sedimentary rock-hosted Au deposits
2. Rich Schweickert and Robert Jacobi: Structural methods and concepts
3. Doug McGibbon: Varied structural controls related to gold deposition at the Marigold Mine, Humboldt County, NV
4. Rachelle Boskie: Detailed Structure and Stratigraphy of Lower Paleozoic Rocks between the Getchell and Pinson Mines, Osgood Mountains, Humboldt County, NV
5. Radu Conelea: Surface Exploration Mapping at Getchell Using GeoMapper, a Real Time Digital System
7. Marcus Johnston: Structural and Temporal Setting of the McCoy-Cove System, Lander County, NV

5:00 - 7:00 Posters and socializing

DAY THREE, Saturday, May 5, 2001
Carlin Trend Structural Ore Controlled Deposits Field Trip: Rain Subdistrict, Mike/Tusc area, Goldstrike area

DAY FOUR, Sunday, May 6, 2001
Getchell Trend Battle Mountain/Eureka Trend Structural Ore Controlled Deposits Field Trip: Marigold, Getchell stop, Twin Creeks

FIELD TRIP THEME

Emphasis on the field portion of the GSN Spring Conference is upon relation of gold mineralization with deposit to district-scale structural features within and around known Carlin-type gold deposits. The role of these structures to gold mineralizing events and regional structural context will be examined.

In the Betze-Post pit, gold mineralization is controlled by a series of NNW-trending anticlines and NNW to NS-striking, east and west dipping faults.

In the vicinity of the Rain pit, high-level, low-angle structural features tend to mask and confuse the more important mineral controlling features, and nearby, the Rain fault is very subtly expressed by look-alike stratigraphic juxtapositions.

At Marigold the Golconda thrust and Red Rock structure zone as well as strong folding and shallowly dipping structures provide important controls to mineralization.

At Twin Creeks gold mineralization is demonstrably related to the east-verging, overturned Conelea anticline with the Lopear thrust providing an evident trap for gold deposition.

Sign up forms are available in the March Newsletter, at the GSN website (www.gsnv.org), or by contacting the GSN office (Laura Ruud, 323-3500), or e-mail gsn@mines.unr.edu.

SPECIAL FIELD CONFERENCE
DONOR SUPPORT

There are a number of opportunities for suppliers, companies and individuals to support the Spring Field Conference and promote their business or message. If you would like to help with an event sponsorship or contribution call Laura Ruud 323-3500 or Dave Shaddrick 746-2071.

Thanks to American Assay Labs and CGS, Inc. for hosting the March Meeting
THE CORTEZ PEDIMENT DEPOSIT, A RECENT DISCOVERY IN AN HISTORIC MINING DISTRICT, LANDER COUNTY, NEVADA

Robert C. Hays, Jr., Chief Geologist and Timothy G. Thompson, Senior Geologist

The Cortez Pediment deposit is a significant oxidized gold occurrence situated approximately 16 kilometers southeast of the Pipeline/South Pipeline deposit in Lander County, Nevada and is a recent discovery within the historic Cortez Mining district. The discovery is the result of focused exploration efforts along an extensive high-angle fault corridor that localizes the distribution of gold in the Cortez area. The two discovery holes were identified within the first seven holes of a 10-hole reverse circulation drill program.

The Cortez Pediment deposit is unique to the district in that it is hosted by a slide block or debris flow that contains mineralized Silurian Roberts Mountains Formation (Srm) clasts within a Tertiary conglomerate. Four distinct material types are recognized that may represent different slide block or debris flow events and different sources. The Tertiary units identified suggest a very deliberate slide or debris flow and not a rock avalanche. There is no placer-style gold enrichment.

The deposit overlies the Cortez lower plate window and is hosted in variably altered, Tertiary conglomerate comprised of silty carbonate clasts sourced from lower-plate Srm. Two mineralized zones have been delineated: a shallow zone along the southern extent of the deposit with a depth to the top of the zone ranging from 45 to 100 meters and a deeper zone at the northern portion of the deposit which begins at approximately 150 meters. Both mineralized zones exhibit a tabular morphology and occupy a general area approximately 900 meters in a northerly direction by 200 meters in an easterly direction. Thickness of the main mineralized zone averages about 75 meters (see attached x-section).

Quaternary Alluvium/Colluvium ranging in thickness from less than 3 meters (along eastern portion of property) to greater than 50 meters (western portion of property) covers the Cortez pediment area. Drill indicated lithologic units include Tertiary conglomerates made up from the autochthonous carbonate rocks (Dw, Srm and Ohc) related to the Roberts Mountains thrust.

A geological resource of 1.4 million contained ounces (49.4 M tons at 0.028 opt) is calculated in which 1.091 million ounces (37.3 M tons at 0.029 opt) are in reserve. Delineation of this new deposit type (in the Cortez district) continues and expansion potential is evident.
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NOTABLE ITEMS INCLUDED:
• Two 4” x 3” x 2” specimens - large, beautiful dark clear green Vivianite crystal groups
• One 10” x 6” x 4” Crocoite - orange needle-like crystals up to 3” long
• Two 3” x 2” x 1” orpiment crystal groups, dark yellow
• One 5” x 3” x 2” specimen, dark matrix with red dogtooth rhodochrosite crystals in vug
• One 18” wingspan carved eagle on quartz crystal base. Eagle carved from dark green rock with chalcopyrite inclusions.
• Four carved Chinese Jade figurines
• One 18” x 4” x 2” silver-looking tin bar stamped “ENAF Bolivia”

For information contact:
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ANNUAL GSN GOLF TOURNAMENT

The GSN Golf Tournament is just around the corner. Roger Steininger, who organized this event for years has stepped down and we’d like to thank him for all of his work in the past.

Bob Felder has volunteered to take on the task of official Tournament Organizer. The Tournament is going to be held this year at Washoe County Golf Course instead of Sierra Sage. The date for this year’s event is Saturday, June 3, 2001 with a shotgun start at 1:00 p.m. Fees are $50 per person and Eklund Drilling has generously agreed to continue sponsoring this event. Registration deadline is Friday, May 25th.

REGIONAL SCIENCE FAIR

The regional science fair was held March 15th, 2001 at Lawlor Events Center. A big thank-you goes out to all of the volunteer judges who gave their valuable time to ensure the continued success of this event. With 120 Judges this year, quick work was made of the task of judging over 1,000 K-8th grade science projects from all over Northern Nevada. Thanks to all who helped out!
GSN FOUNDATION UPDATE
Joseph Anthony Kizis, Jr., Chairman of the Board

The GSN Foundation is a 501(c)(3) public charity that sponsors several programs advancing the Earth sciences in Nevada. These programs are the K-12 Earth science field trip grants, scholarships for students at UNR and UNLV, grants for basic geologic mapping in Nevada, and donations to UNR’s Earth science library.

Donations and fund-raising activities have contributed $16,941 to the Foundation as of early March. Of this amount $9,000 has been contributed to the Endowment Fund. All of the Foundations’ work is done by volunteers, so that only a miserly $134 of the Foundations funds have been used for non-charitable expenses such as bank charges and accounting fees.

The Foundation is pleased to report that it has contributed $5,880 to two programs: $5,380 to the K-12 Earth science field trip grants, and $500 to the UNLV scholarship. The Geological Society of Nevada earlier this year contributed $2,000 to the UNR scholarship.

We continue our efforts to build an endowment fund to provide financial support for future years. Our goal is to raise $100,000 for the endowment fund. This amount will provide sufficient investment income to cover the majority of our annual funding requirements.

The Directors ask you to consider supporting the GSN Foundation. Donations for the Endowment fund should be clearly marked as such and sent to the GSN office. Donations are also encouraged to the Unrestricted Fund, which can be used in its entirety for immediate needs. Any amount will be greatly appreciated. All donors will be featured periodically in the GSN Newsletter and at GSN Foundation activities. Categories for your tax-deductible donations are listed below:

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<th>Donor Level</th>
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<td>Donor</td>
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<td>Benefactor</td>
<td>$5,000 and above</td>
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As an added incentive, early donors will be forever designated “Charter Founding Donors”.

COMPUTER SALE

The GSN office is selling its spare computer, screen and printer as a package deal to the highest bidder. Laura had the good fortune of inheriting the 2000 Symposium’s computer set-up and she really can’t use two computers! The money from this sale will be put in the Foundation account as a donation. The computer is a Gateway which has been upgraded with a Pentium Processor (clone), has 16 megs of memory and a 3 gig hard drive. It comes with a 15” screen and the printer is a LaserJet 4P. All the components are in good working order. Please contact Laura Ruud at the GSN office by May 15th with your bid. 775/323-3500 or gsn@mines.unr.edu.

Paid Advertisement

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PROSPECTORS AND
DEVELOPERS ASSOCIATION

A big thank-you goes out to Neville Rhoden, Elizabeth Zbinden and Steve Ristorcelli who graciously volunteered to pack boxes of books up to the PDAC in Toronto last month. Your help was much appreciated.

Also, thank you to the members who helped keep GSN’s expenses in Toronto down by buying a meal, a cup of coffee, or paying a taxi fare, for Laura. Every dime you spent saves GSN money and we are ever thankful.

Speaking of the Prospectors & Developers Association Convention - there was an upbeat feeling in the air in Toronto. There were over 7000 attendees and many of them came by the GSN booth asking about Nevada mining in general.

Total income at the booth was almost $1000 and we hope that more sales will be generated from the order forms that people picked up at the booth. In addition, the GSN Spring Field Conference received a cash donation from Bob and Patty Schafer who live in Ontario and attended the PDAC.

Visit the GSN website at www.gsnv.org
UP-COMING EVENTS

Apr 4 – GSN WINEMUCCA CHAPTER MEETING: Red Lion Inn & Casino, Humboldt Room, Winnemucca, NV. Speaker – Randall Vance; title – “Regional geology, alteration, and exploration of Proterozoic-age (Cu-Au-Ag-Co-U) iron-oxide breccia bodies, Wernecke Mountains, north-central Yukon Territory, Canada.” 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.

Apr 5 – Nevada Petroleum Society, Rutherford’s Old South Restaurant, McCarran House, Sparks, NV. Dr. Robert Loucks, Univ of Texas, Austin. Paleocave systems: origins, burial-depth modifications, spatial complexity, and reservoir implications. 6:30 pm-cocktails, 7:00 pm-dinner, 8:00 pm-talk. 775/827-1323 for reservations.

Apr 13 – SME, Northern NV Chapter monthly meeting, Noon at the Bonanza Casino, N Virginia St, Reno, NV. Reservations not required. Contact Nathan Earl Robison for information at 348-7997.

Apr 19 – GSN ELKO CHAPTER MEETING: Desert Inn, Elko, NV. Speaker - Gary Baschuk; title – “Searching for Carlin Trends in Northern Spain.” Social at 6:30 pm, talk at 7:00 pm. Call Keith Bettles, 775/778-8149 for information.

Apr 20 – GSN MEMBERSHIP MEETING: Reno Elks Lodge, Reno, NV. Speaker – Robert C. Hays, Jr., Cortez Gold Mines; title – “The Cortez Pediment Deposit, a recent discovery in an historic mining district, Lander County, NV.” Social-6:00 pm, dinner-7:00 pm ($17), talk-8:00 pm. Details on page 3 of this newsletter. Call Laura Ruud, 775/323-3500.


Apr 27 – Economic Geology, 8th Ralph J. Roberts Distinguished Lecture. J. Alan Coope, “Geochemical Exploration - Expanding Potential.” College of Education Room 2030, 3:00 pm. 775/784-1382.


May 3 – NPS Monthly Meeting, Topic to be announced. Rutherford’s Ol’ South in the McCarran House, Sparks, NV. 775/747-6678 for information.

May 3-6 – GSN SPRING FIELD CONFERENCE, Battle Mountain, NV. REGISTER NOW! Call Laura Ruud at 775/323-3500 or email gsn@mines.unr.edu for more information.


OCCUPYING EVENTS

Apr 2, 2000

Dear GeoSoc,

Thank you so much for the trip.
Of my group, it was the best trip ever.
I can’t believe I found a fossil.
It was long and orange and yellow. Everyone
in my block came for a look.
My family thought I went crazy.
A limerick and a fossil.
I wish I could go back.
The weather was great.
I felt cool when I found a fossil
that was fossilized millions of years ago. It was great.

Sincerely,
Kyle Carter

West End, Fallon

Dear GeoSoc Members,

I would like to thank you for
the wonderful field trip. I found twenty
treasures. It had a lot of fun. I wish
I could go back. The weather was great.
It felt cool when I found a fossil
that was fossilized millions of years ago. It was great.

Thank you again,
Mrs. Lori McGaughy

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