# GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Reno, NV 89512 (775) 323-3500 - Hours Monday -- Friday, 10 a.m. to 5 p.m.

Website: www.gsnv.org • E-mail: gsn@gsnv.org



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Patty Capistrant, Kinross Gold
plcapistrant@amail.com

VICE PRESIDENT Steven Weiss, Consultant, Geologist siraweiss@outlook.com

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#### **GSN WINNEMUCCA CHAPTER**

The GSN Winnemucca Chapter meeting will be held at the Martin Hotel, 94 W. Railroad St. SPEAKER: Alex Davidson, Hycroft. TITLE: "Exploration update on developing high grade Ag trends at Hycroft". SPONSOR: HYCROFT MINING. For more information, please contact Chapter President, Kris Alvarez at: kalvarez@i80gold.com. Details on page 6.

NOV. 15, 2024 FRIDAY

#### **GSN REGULAR MEMBERSHIP MEETING**

The GSN meeting will be held at the Atlantis Hotel & Casino, Reno, NV. SPEAKER: Richard Goldfarb,Research Prof., CSM. TITLE: "Gold Deposits: The Science and the Science Fiction". SPONSOR: TONATEC EXPLORATION, LLC. Dinner cost is \$60. Please register for dinner online or RSVP at this link: RSVP/DINNER Details on pg. 3. PLEASE RSVP BY 5 PM ON MONDAY, NOVEMBER 11th.

NOV. 21, 2024 THURSDAY

#### **GSN ELKO CHAPTER**

The GSN Elko Chapter will hold their meeting at the Western Folk-life Center, 501 Railroad St. Elko. SPEAKER: Alan Morris, Surge Battery Metals. TITLE: the Nevada North Lithium Project. SPONSOR: SCOUT DISCOVERIES. Please contact Elko President, Ajeet Milliard Ajeet@megllc.net for more information. Details on page 7.

DEC, 18, 2024 WEDNESDAY HOLIDAY PARTY

#### **GSN HOLIDAY PARTY AND FUNDRAISER**

Mark your calendars now and get ready to take part in the Silent Auction and Raffle by donating a prize! See page 12 for details. **SPONSOR: ENVIROTECH DRILLING.** 



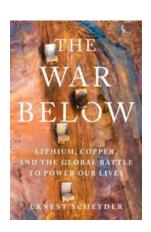
#### **GSN NOVEMBER RENO MEETING SPONSOR**



# FROM THE PRESIDENT—NOVEMBER 2024 Patty Capistrant GSN President June 1, 2024-May 31, 2025

We, as geoscientists, are in a unique position to understand the beginning of the supply chain for metals that are used in our everyday life, like copper, REEs, lithium, cobalt, antimony, and others that have recently been in the limelight as US designated critical metals. We understand the earth processes that are responsible for the introduction and focusing of these metals into different environments. Armed with that knowledge, it is often our pleasure to head out into the desert in search of them! What ends up being less obvious to us is what happens to these resources after they are found. Ernest Scheyder, a Reuters journalist, sheds insight into just this question in his new (January 2024) book, *The War Below: Lithium, Copper, and the Global Battle to Power Our Lives*.

The book investigates the conversation happening right now between the mining industry, conservation groups, communities, and policymakers in regard to a number of advanced exploration and development projects, many right here in Nevada. Author Ernest Schedyer visits the projects he narrates on, offering a balanced view of their pros and cons, and includes the history of the projects from discovery to development. For example, what exactly is Tiehm's buckwheat, and what does it have to do with the lithium at Rhyolite Ridge? Schedyer's visit to the site with the Center for Biological Diversity's Patrick Donnelly offers an interesting conversation about the importance of the unique wildflower. However, this is markedly balanced with a discussion about the boron and lithium resource that would seemingly help lead the US to energy independence and help fight the challenge of climate change. Other projects covered in the book include,



Thacker Pass (Nevada)

Resolution (Arizona)

Mountain Pass (California)

Twin Metals (Minnesota)

Stibnite (Idaho)

Carolina Lithium (North Carolina)

Salton Sea (California)

And several others!

I take no stance on the issue and suggest that the book, similarly, does not. Instead, it offers an in-depth look at a number of projects that are relevant to our industry, our lives, and the nuanced economic, social, and environmental impact they have had and are having. A fascinating read that prompts thought and discussion.

After you're finished reading, I hope you will join us for one of our November events. In Winnemucca, the GSN Chapter will be hosting Alex Davidson with Hycroft Mining to speak on November 14, details on page 6. And for the Elko GSN Chapter, the speaker will be Alan Morris of Surge Battery Metals on November 21. We are also extremely pleased to welcome Dr. Rich Goldfarb at our general meeting in Reno on Friday, November 15<sup>th</sup>. See details about his talk on page 3. It is also the beginning of the holiday season (according to me, anyway!) – I hope you will consider donating a prize for our annual Holiday Party, set for Wednesday, December 18<sup>th</sup>. The event is generally well-attended, and the largest fundraiser for the GSN Foundation each year. Prizes, such as gift baskets, jewelry, antiques, or other collectibles, can be dropped off at Paragon Geochemical. See details on page 12. As always, thank you for reading!

Patty

# GUEST SPEAKER: RICHARD GOLDFARB, Research Professor CSM, China University of Geosciences Beijing & Independent Consultant to the exploration & mining industry

TITLE: "Gold Deposits: The Science and the Science Fiction"

Sponsor: TonaTec Exploration, LLC

TIME: Drinks @ 6:00 pm, Dinner @ 6:30 pm, Talk @ 7:30 pm

WHERE: Atlantis Hotel & Casino, 3800 S. Virginia St., Reno, NV

DINNER COST: \$60. Please RSVP online by 5 PM on Monday, November 11th at:

<u>DINNER RESERVATION</u>

#### **Abstract:**

Global gold production is estimated at about 3100 t/year, with demand being 50% greater, which is a major factor contributing to about 40% of the world's exploration budgets being focused on gold as the main target. Most present-day exploration is focused on oxidized intrusion-related gold deposits (OIRGD: porphyry, epithermal) and orogenic gold deposits, which have roughly equal global endowments but much different distributions in space and time. Theoretical genetic models are well-accepted for the shallowly formed (≤3 km) and younger OIRGD in which gold is sourced from shallowly emplaced intrusions. Orogenic gold deposits, in large part reflecting their deeper formation depths and commonly older age of formation, are characterized by significantly more controversy regarding genetic processes. Deposit models for some other gold deposit types (Carlin-type, reduced intrusion-related gold, IOCG) are also less clear. These other deposits have proven and reliable local exploration models but because of their more limited global recognition, many of their broad-scale genetic features are poorly understood. The recent literature is filled with conflicting information regarding genesis of these more deeply formed or less widely recognized gold deposit types. Are orogenic gold deposits products of metamorphic processes or can they have a magmatic origin? Is there a mantle connection for various gold deposit types? Where do Carlin-type deposits fit in the magmatic vs metamorphic genetic association? Are there good global examples of other Carlin-like deposits? Why do many giant gold deposits classified as orogenic show epithermal-like mineralization textures? Can giant gold deposits reflect multiple events separated by many tens to hundreds of millions of years? It is critical in addressing these and related major questions of gold metallogeny that we consider the significance of good geological common sense rather than always accepting state-of-the-art analytical data as providing magical answers.

#### **Speaker Bio:**

Richard Goldfarb received his BS in geology from Bucknell U., MSc in hydrogeology at University of Nevada (Mackay School of Earth Sciences), and his PhD in geology at the University of Colorado. He was a research geologist at the U.S. Geological Survey for 36 years where his studies focused on global metallogeny, geology of ore deposits in the North American Cordillera with emphasis on orogenic gold, lode gold deposits in China, and geochemical applications to the understanding of ore genesis. He has served as a President of the SEG, Chair of the SEG Publications Board, member of the Editorial Board of Economic Geology, and Chief Editor of Mineralium Deposita. He was awarded the SEG Silver Medal in 2011 and SEG Gold Medal in 2023, Kutina-Smirnov Medal by IAGOD in 2014, and the Gold Medal by SGA in 2022 for his various contributions to economic geology. Presently, Rich is a research professor at China University of Geosciences Beijing and Colorado School of Mines, and is an independent consultant to the exploration and mining industry.



#### "FACES OF GSN"

## Lynne Volpi, Elko, Nevada

"Dad, why do those rocks look like that?"

"I don't know, honey."

"Dad, is that a big crack in the mountain?"

"Honey, I don't know."



This was the dialogue that frequently occurred in the car while on long trips with my family. My father was forever patient but was not a geologist so could never answer my questions. The only thing he answered to my satisfaction was what the sign "Watch For Falling Rock" meant. He told me it meant they were looking for the Indian, Falling Rock, so to be on the lookout for him. When I told him I was going to major in geophysics at UNR, I was surprised that he was surprised. He must have forgotten all those rock-related questions from his ten year old daughter.



UNR Field Camp, Sierras, 1974

Mackay School of Mines was a great fit for me, but geophysics was not. Once I realized that majoring in geophysics meant even more than two semesters of both physics and calculus, I changed my major to geology, not realizing that I was now in school to learn to be a prospector. And a prospector I became, scoring a job as a junior exploration geologist, exploring a massive sulfide deposit for Superior Oil Company Minerals Division, based out of Grass Valley, California. I was led to this job because after six weeks of fun at summer field camp (in those days, three weeks at lovely Garfield Flat near Mina and three weeks at Lundy Lake in the Sierras), I could

not bear to come back to my part time job as a waitress at Harrah's. So, I asked the Dean's secretary to let me know if any companies called, looking to hire someone part time. Superior called within the next week, and I got the job for the duration of my senior year. When I interviewed with Ben Dickerson for the junior exploration geologist position, he told me "It will be a real feather in my cap if I hire you, because we don't have any women field geologists." I felt like replying, "You're welcome – glad to fill the quota."

I spent two years in California drilling out a massive sulfide, then two years in Prescott, Arizona, exploring for massive sulfides in Precambrian rocks, then two years in Reno, first doing massive sulfide and then Carlin type gold exploration in Nevada and Wyoming. I then jumped to Gold Fields Mining Corp., having been offered a research geologist position which was great as long as it lasted. At that point, thinking that I wanted a job that kept me in town more, I went back to UNR and got my MBA. Little did I know that the business world would not suit me; I would end up back in some aspect of geology after all.



Lynne in the core shed, Grass Valley, 1975

As an aside, during the time that I was working for (cont. on page 5)

Volpi, Faces of GSN (cont. from page 4)

Superior in Reno, I volunteered as membership chair for GSN, then a small organization of mostly academic types that met monthly at The Stein, a German buffet-type café on Center Street just a half block away from Harrah's. The GSN president was my boss at Superior; he and I came up with a plan to "grow" the organization by moving the meetings away from The Stein to a larger venue. We chose Sierra Sid's in Sparks (now Western Village) where they had a large meeting room up a back stairway. They served us a great buffet dinner each month, and it seems like we at least tripled attendance, so it turned out to be a good move. After a couple of years, I became the first female GSN president. In later years, I served on the GSN board of directors.



Bob Wheatley and Lynne, 1977

When a friend moved away from Reno, she turned over her mining-related news clipping service to me. Seven years of doing that, along with getting married and having a son, was a great segue into working for Barrick as a contractor. Barrick had just bought Lac Minerals, and they needed someone to consolidate their property files and library into the Barrick systems — right up my alley. Just about when I finished that up, they bought Homestake, a 150 year old mining company, so add *that* to my job security. And about when I finished that, they bought Placer. I decided I needed a new challenge, so cold-called a woman who was heading up exploration for a new-ish exploration company. She hired me to develop a competitors' database, a great job that lasted until the day that the big boss fired five geologists, me included.



Field work in Idaho, 1981

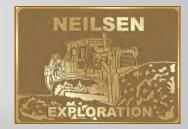
Soon after, Women's Mining Coalition came calling, asking if I would like to take on the job of coordinator. Another great fit that lasted for ten years; I retired in 2019 but have stayed on the WMC Board of Directors as secretary, so am still working in the mining industry.

Who knew I would be connected with mining for almost 50 years? It has been a great ride during which I have seen some amazing places and met some excellent people. Thanks, rocks!

#### GSN wishes to thank our OCTOBER MEETING sponsors in Reno, Elko and Winnemucca!









## GSN WINNEMUCCA CHAPTER NEWS



#### Please join us for the

Winnemucca GSN October Meeting

**Thursday**, November 14, 2024

The Martin, 94 W. Railroad St., Winnemucca, NV

Food and Drinks at 6 pm; Talk at 7 pm

Speaker: Alex Davidson, Hycroft

Title: "Exploration update on developing high grade Ag trends at Hycroft"

#### **FOOD AND BEER SPONSOR:**



#### Abstract:

Work completed in 2023-2024 has further defined higher grade silver mineral trends within the Brimstone and Vortex ore bodies. Trend orientation, metal zonation, vein density, alteration, and Au-Ag ratios indicate these trends are not closely related and likely have separate fluid sources. Brimstone mineralization is dominantly vein hosted with remarkably high Ag-Au ratios (>3000:1), has increased Cu, Pb, Zn ratios, and preliminary petrographic work indicates the dominant ore minerals are tetrahedrite and naumannite. Vortex mineralization is tied more closely to a flooding event influenced by premineral low angle (35°- 40°) structural fabric resulting in a broader zone of mineralization. Preliminary petrography suggests that very fine-grained gold is contained in arsenical and antimonial pyrite overgrowth bands, on earlier, coarser grained pyrite; exceptionally fine grained arsenopyrite is also identified. Dominant silver minerals identified at Vortex are miargyrite and selenostephanite; Ag-Au ratios >150:1 are observed. Electrum has not been identified at either Brimstone or Vortex.

Ongoing work on structural interpretation, alteration models, down hole vein orientations, geochemical analysis, petrography and geophysics will continue to refine the understanding of these trends as well as identify targets moving forward.

If you have any questions, contact Kris Alvarez at kalvarez@i80gold.com or 775-621-6195



#### GSN ELKO CHAPTER NEWS



## Please join us for the Elko GSN October Meeting Thursday, November 21, 2024

Western Folklife Center, 501 Railroad St., Elko, NV Drinks and Appetizers at 6 pm; Talk at 7 pm

Speaker: Alan Morris, Surge Battery Metals

**Topic: the Nevada North Lithium Project** 

FOOD & DRINKS SPONSOR: SCOUT DISCOVERIES

SCOUT

A huge THANK YOU to the volunteers that donated their time on Saturday October 26 to help with the Elko Chapter's Lamoille Highway Cleanup. An even BIGGER THANK YOU to Nick Helfer (Elko Chapter VP) for making the effort to plan the clean up and for the persistence to make it happen! It is truly appreciated by the Elko Chapter as well as the Spring Creek community. We had numerous thanks and shout-outs posted on the Elko People Reporting Facebook Page; all positive and thankful. It is always good to give back to the community that supports us so strongly! Because twice just isn't enough, let me say it again; THANK YOU!!!

#### Abstract:

The NNLP project is located about 25 road miles southeast of Jackpot, Nevada on the eastern flank of the Granite Range. Mineralization is hosted in Miocene lacustrine sediments deposited in an extensional basin bounded on the west by Paleozoic carbonate and detrital rocks intruded by the Jurassic age Contact pluton and on the east by a block of upper-plate shale and chert overlapped by Permian silty limestone of the Pequop Formation. Results of detailed mapping conducted by Chafetz during the 2024 field season will also be presented.

The basin is filled by the Humboldt Formation, primarily tuffaceous sediments with occasional beds of variably welded tuff and alluvium from the adjacent highlands. Mineralized rocks are dominantly blueish grey lacustrine clay and marl, frequently bearing 0.5 – 2 mm crystals of calcite with rare sodium carbonate (trona). Clay minerals include species of montmorillonite, saponite, and illite.

Exploration drilling in 2022 and 23 led to maiden inferred resource estimate of 309 million tonnes at an average grade of 2,839 ppm lithium yielding 4.67 million tonnes Mt Lithium Carbonate Equivalent (LCE). This assumes operating costs of 88.50 \$/T, process recovery of 73.5%, and a 1,250 ppm Li cutoff. Increasing the cut-off grade to 2,000 ppm Li yields a resource of 244 Mt @ 3,167 ppm Li, and 4.07 Mt LCE. Subsequent drilling during the 2024 field season gives an updated inferred resource of 701Mt @ 3010 ppm Li for 11.24Mt LCE at a cut off of 1250 ppm Li.

The project has progressed very quickly with staking in early 2021, first soil results in February 2022, and the maiden resource estimate two years later in March 2024. An Exploration Plan of Operations was filed with the Bureau of Land Management in October 2023 to allow for development drilling during the 2025 field season. A Preliminary Economic Assessment (PEA) is expected to be completed in early 2025.

If you have any questions, please contact GSN Elko Chapter President, Ajeet Milliard, ajeet@megllc.net

# **GSN 2024 Fall Field Trip Wrap Up By Steve Weiss, GSN Vice-President**

The 2024 Fall Field Trip to Hog Ranch and Hayden Hill on October 11-13 was an enjoyable and stimulating weekend of Nevada high desert and northeastern California geology and epithermal gold-silver deposits. We were treated to everything from blue skies and crisp autumn mornings to cold rain showers and muddy boots. My sincere thanks to our members Cherie Leeden, Stephanie Grocke and Dave Flint for co-leading the tours of the Hog Ranch area and Hayden Hill and sharing their knowledge and insights. Thanks to all our field trip sponsors who made the trip possible: Rex Minerals, Boart Longyear, American Assay Labs, Harris Exploration, Neilsen Exploration, Premier Drilling, ALS Minerals, and Alford Drilling, and Joe Laravie at Great Basin GIS!

As you may have heard, one of our members driving his pickup as a support vehicle on the trip was involved in a serious collision on US-395 during the final hour of the return to Reno late Sunday afternoon. Thankfully, there were no injuries, but we were all reminded of how quickly good times and a great weekend can come to an abrupt stop, and how important it is to be focused on safety on the road. I am grateful to all the trip participants for their patience and calm while we stopped to assist the driver and his two passengers, and make sure all were OK and could continue back to Reno.



(MORE FIELD TRIP PHOTOS ON PAGE 9!)

# THANK YOU AGAIN TO OUR GENEROUS F.T. SPONSORS!



















#### Fall 2024 Field Trip Pics!

by Laura Ruud







































#### **GSN Geological Symposium Update—27GSNS**

Symposium Event Dates: Thursday 22 April to Saturday 1 May 2027

Location: The Nugget Casino, Reno/Sparks, Nevada USA

**Last meeting held:** Monday 14 October. Admittedly we erred in the distribution of the electronic meeting invitation, our apologies, our digital skills are improving each meeting, and recordings/minutes have been sent to the 27GSNS volunteer members to refer in the absence of receiving a timely invitation. We are now using AI to create the meeting minutes and can now distribute within 24hrs of meetings being held ....wow AI really is a time saver!

Due to the Veteran's Day Holiday the next meeting will be scheduled on: Monday November 18<sup>th</sup> 4-5pm Volunteer 27GSNS meetings are held monthly, every 2<sup>nd</sup> Monday 4-5pm, the meetings are hybrid with face2face (in Reno) and Zoom for remote dial in. For the November meeting, we are seeking a company that would like to host by providing a suitable venue with ability for remote laptop coms, Zoom visual and audio conference room facilities as the Committee would like to move the meeting to different venues around Reno to enhance the opportunity for individuals to periodically attend face2face meetings. If you have a suitable venue kindly email Christine Ballard at <a href="mailto:secretary@gsnsymposium.org">secretary@gsnsymposium.org</a> to arrange a future 27GSNS monthly meeting.

The 27GSNS Volunteer Steering Committee has been busy consulting and preparing the **2027 SYMPOSIUM TOPIC/THEME NOMINATION.** Nomination requests were sent to the GSN members and affiliate groups in September and 55 nominations were received and finalised in October. It was great to receive a record # submissions demonstrating engagement and enthusiasm from the GSN community ..... thank-you ...... it makes our volunteer efforts feel valued and appreciated.

This week we are getting into the swing of the voting season and are distributing our own survey for members to collectively **VOTE** to decide the **FINAL TOPIC/THEME for the 2027 Symposium**. The nomination with the most votes will be announced the winner. There are 5 weighted (1-5) votes and only GSN members are entitled to vote, the voting will be open for a week until November 6<sup>th</sup> @ 5pm PT. Nomination names are purposefully withheld to avoid voter bias, please respect and maintain this professional approach.

PLEASE VOTE. Link and QR code below.

https://www.surveymonkey.com/r/2027GSNSymposium



The 27GSNS Steering Committee reserves the right to conclude the exact final wording of the Topic/Theme nomination and the majority voted nomination shall be presented to the GSN Executive and Board to ratify during their November 14<sup>th</sup>, 2024, quarterly meeting. Post the Board meet and hopefully acceptance of the Topic/Theme, the winner will be announced and shall be awarded their **\$200 cash prize!!!** 

The next competition will be the **SYMPOSIUM LOGO** so all those artistically gifted geologist extraordinaries, sharpen those pencils and crayons, and get ready to submit your prize-winning logo design.

Post Board ratification of the 2027 GSNS Steering Committee and voted Topic/Theme, the focus will shift to the sub-committees and lead designations with task assignment to those who volunteer and are endorsed by the GSN Steering Committee. These items will be discussed during the monthly November 2024 meeting. Other foundational items the Steering Committee shall be focusing includes fulfilling the Treasurer position as well as the website launch, bank account and preliminary budget. (continued on page 10)

The Christmas busy season is fast approaching and there will be no monthly meeting held in December, so the next meeting after November will be held January 13<sup>th</sup> 2025.

# The 2027 Geological Society of Nevada Symposium Theme/Topics nominated by the GSN membership & affiliate groups in September is provided below. This is the list of Theme/Topics which are currently being voted on.

4	Construct to Deletition Deletitio
1	Geoscience in Transition: Redefining Resource Discovery
2	Great Basin Geology and Ore Deposits: 40 years of GSN Symposiums to shape the past and guide the future
3	A Shape to the Future - The Global Impact of Exploration, Discovery, Mining, and Reclamation
4	Shifting to a Lower Carbon Footprint - Essentials in Tackling Climate Change in Mining and Exploration
	(Energy Transition in the new Millennium)
5	Ore Deposits of the Great Basin - Key to America's Mineral Independence
6	Metals and Critical Minerals Discoveries 2027:
	Window of Opportunities
7	Mineralogical Marvels: Unearthing Earth's Geological Wealth
8	Precious, Base, and Critical Mineral Deposits of the Great Basin in an Evolving World
9	Geological Society of Nevada
	Ruby Anniversary Volume
10	Forty Years of Cutting Edge Geological Studies
10	Exploration of the Great Basin: Finding Minerals for Our Future
11	The Diversity of the West
12	From Rocks to Riches!
13	
	The Evolution of Precious, Critical Minerals and Why We Need Them
14	The Next Resource Boom: Innovation, Discovery, and Impact
15	Learning from the Past while Forging the Future
16	Mineral Systems of Nevada; Furthering the Exploration and Mining Potential of the Silver State
17	Exploration and Innovation in the Great Basin
18	40 years of GSN Symposiums 1987-2027: A promising future enriched by the past
19	A Voice for Exploration - Chemical Evolution and its Impact for Change
20	Geological Society of Nevada
	Ruby Anniversary Volume
	The Cutting Edges of Science
21	Metals-Critical Minerals/Geology and Ore Deposits
22	Exploration-Mining Opportunities
22	Forging Ahead into the Future
23	Reversing the Declining Rate of Discovery
24	Metallogeny of Ore Deposits - A Deeper Look into Mining and Exploration of the American Cordillera
25	Gold: It's still here
26	Gambling With Prosperity: The Search for Strategic Minerals
27	Innovations in Exploration – Modernizing Exploration for the Future
28	Geology and Ore Deposits of the Cordillera 2027
	Window of Opportunities
29	Exploration and Innovation in Geology and Ore Deposits

30	Changing Exploration Frontiers: Mineral Resources for the Energy Transition
31	40 years of GSN Symposiums 1987-2027: Looking to the past to shape the future
32	The Great Boundless Basin - Domestic Supply for the Future
33	Upside Down - A Deeper Look into Mining and Exploration of the American Cordillera
34	Geological Society of Nevada
	Ruby Anniversary Volume
	From Rough to Gem: 40 years of GSN
35	Discovery from the Outer Arch
	Geology and Ore Deposits of the Interior
36	GeoDeposits 2027: Unveiling Earth's Mineral Wealth
37	Critical Mineral Resources of the Great Basin: Geology, Exploration, and Sustainable Development
38	A Broad Look at Mineral Deposits Aiding the Global Economy - An Impact for Change
39	Critical Minerals Potential in Nevada
40	Discovery in Mature Exploration Terrains
41	Mineral systems at all scales; Outcrop to mine to district
42	From Core to Market: Shaping the Future of Mineral Resources
43	Metals and Critical Minerals Discoveries 2027:
	Exploration-Mining Opportunities
44	Geological Society of Nevada
	Ruby Anniversary Volume
	Forty Years of Multifaceted Science
45	Geology and Ore Deposits - A Voice for Exploration
46	Critical Mineral Potential of the Great Basin & Beyond
47	Ground Breaking Discoveries - A Voice for Exploration
48	Geology and Ore Deposits of the Great Basin 2027
	Window of Opportunities
49	40 years of GSN Symposiums 1987-2027: Learning from the past to guide the future
50	In Vein Exploration
51	Geology and Ore Deposits - A Voice for Exploration
52	Critical minerals? and New Exploration Frontiers
53	Gold is Where You Find It
54	Geological Society of Nevada
	Ruby Anniversary Volume
	Facets of Discovery
55	Geology and Ore Deposits of the W. US and Canada
	Window of Opportunities

Thank-you to all who have contributed so far, stay tuned for more good news flow.

From the 27GSNS Symposium Steering Committee

Regina Molloy – Chairperson - <a href="mailto:chairperson@gsnsymposium.org">chairperson@gsnsymposium.org</a>

Mark Travis - Deputy Chairperson - <a href="mailto:depchairperson@gsnsymposium.org">depchairperson@gsnsymposium.org</a>

Christine Ballard - Secretary - secretary@gsnsymposium.org

Treasurer - Vacant



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#### **NEWS FROM THE FOUNDATION**

November, 2024 Bob Felder



The annual holiday party and fundraiser, will be held this year at the Atlantis on Wednesday, December 18. Mark your calendars!! We couldn't do this without the continuing generous support of our members, so it's time to start thinking about donations for the fundraiser. Items such as mineral specimens, gift baskets, wine, spirits, jewelry, rare books and maps, usable field gear and clothing are all good ideas, but we welcome any quality item that you think would be desirable for auction or bid. Paragon Geochemical has once again agreed to store donated items at their office (note new address).

PARAGON GEOCHEMICAL: 1545 Industrial Way, Sparks, NV 89431. Hours for dropoff: 9AM to 3 PM See Carol Flores or Doug Hensen

This is the biggest fundraiser for the Foundation. Thank you!!











The mission of the GSN Foundation is to provide funding for the Geological Society of Nevada's philanthropic contributions around Nevada. This work is not possible without the donations GSNF receives throughout the year, during the holiday party fundraiser and from generous donations from our members. Thank you!!



## **AIPG Exploration Roundup**



The AIPG Exploration Round-up will be held on **Tuesday, December 10th at 6:00—9:30** PM, at the Atlantis Hotel in Reno, NV. We will have speakers from six mining and exploration companies on the program and a mineral specimen raffle as well. Dinner Cost—\$70.

Please contact Kel Buchanan for more information at: 775-786-4515 or summitcrk@aol.com

Presenters will be from the following companies:













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#### BRIAN MORRIS TRAP SHOOT FUNDRAISER WRAP UP!



By Laura Ruud

The GSN's 4th Annual Brian Morris Trap Shoot fundraiser was a big success and a lot of fun! It was held on Saturday, October 26th at the Winnemucca Trap Club and they brought in an all-time high of \$21,675! 46 clay busting competitors broken up into 2-Buddy teams competed for cash prizes and bragging rights. As kind of expected, the Club teams swept the top three spots with the first-place guys shooting 40 out 40! They all generously donated their cash prizes back to the fund-raiser in perfect sporting fashion. The shoot was followed by a silent auction, live auction and a catered prime rib dinner supplied by the Martin Hotel. All proceeds go to the Brian Morris Scholarship Fund managed by the GSN Foundation. This effort is organized by Chad Peters and John Marma, two GSN volunteers who are dedicated to preserving the memory of their great friend Brian Morris who was killed, along with a young doctor, while providing aid to an injured driver that had been in a head-on collision on Mt. Rose Highway in Reno back in November of 2018. A huge thank you goes to our generous sponsors and all of the partici-



Some GSN members that are pictured: John Marma & son Jack; Chad Peters, Robert Myers, Daniel Slade, Johnnie Noble, Trevor Greener, Darrel Tweidt, Arnie Luther, Rich Perry, Jon Carlson, Brian Johnson, Steve Cochran, Tim Janke and Larry Radford.

# OVER \$20,000 RAISED

# THANK YOU TO ALL SPONSORS & PARTICIPANTS!

# 5TH ANNUAL

# BRIAN MORRIS MEMORIAL TRAP SHOOT

























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The Hennessey Family
Eric & Jill Schifferli
Todd & Tammy Delong

Wally & Judie Hufford William Burstow Randy Vance The Ruud Family The Huet Family

#### **OTHER UPCOMING EVENTS**

November 12, 2024 Arizona Geological Society Speaker Series 2024 via Zoom. Speaker: Carson Richardson, Arizona Geological Survey. Title: "Arizona's Place in the Green Energy Transition, Strategic and Critical Minerals, and How They will be Sourced". More information and online registration here: <a href="https://www.arizonageologicalsoc.org/event-5920493">https://www.arizonageologicalsoc.org/event-5920493</a> Remote Broadcast begins at 6:35 PM. URL pending.

November 7, 2024 Nevada Petroleum & Geothermal Society meeting, 13101 S. Virginia St., Reno, Nevada. Speaker: Stephan Henriquez of Baker Hughes-GaffneyCline. Title: ""Moving Geothermal Projects from Design to Commercial Success: Connecting the Subsurface to the Surface". Bar opens @ 6:30 pm, Dinner @ 7:00 pm, Presentation @ 7:30 pm. click here to register: Register Now

<u>November 20, 2024</u> - Utah Geological Association lunch meeting, 11:30 am—1 pm, 1594 W. North Temple DNR Auditorium, Salt Lake City . Speaker: Hintze awardee will be presenting. Register here: <a href="https://">https://</a> utahgeology.org/events/november-2024-uga-luncheon-2

November 18, 2024 SME Northern Nevada Chapter Meeting, Circus Circus Mandalay Room, Reno, NV. Drinks 6 pm, Dinner 6:45 pm, Talk 7:30 pm. Speaker: To be announced. Title: To be announced. Email: <a href="https://doi.org/10.1007/NVSME@gmail.com">NVSME@gmail.com</a>. email us about the details. Visit the website for more information and to RSVP: <a href="https://doi.org/10.1007/NVSME">NNVSME Website</a>

<u>December 1-5, 2024:</u> AEMA Convention, Nugget Casino, Sparks, NV. GSN in Booth #314! <u>AEMA Convention</u> Website

December 10, 2024: AIPG Exploration Roundup, 6:00 PM to 9:30 PM Atlantis Hotel, Reno, NV.

<u>December 12, 2024 (tentative)</u>: GSN Winnemucca Chapter Holiday Party, Auction Fundraiser, The Martin Hotel, Winnemucca, NV.

December 18, 2024: GSN Foundation Fundraiser Holiday Party, Auction and Raffle. Atlantis Casino, Reno, NV.

**December 19, 2024:** GSN Elko Chapter Christmas Party Auction Fundraiser, Western Folklife Center, Elko, NV.



Dear Friends and Colleagues:

The <u>Lowell Program in Economic Geology</u> is pleased to announce that registration is opening for the 20th offering of our popular Short Course on Ore Deposit Types, which will take place from Tuesday, December 10, through Thursday, December 19, 2024. This year's theme is Porphyry, IOCG, and Alkalic Cu and Au deposits.

This 9-day short course is designed for industry members and graduate students and will be led by <u>Mark</u> <u>Barton</u>, <u>Eric Seedorff</u>, and others. It will focus on exploration geology, including 3½ days of lectures, 2 days of labs in Tucson, and 3½ days of field trips to representative ore systems in Arizona. Saturday, December 14, 2024, will be a day off to rest, shop, or enjoy the Tucson scenery.

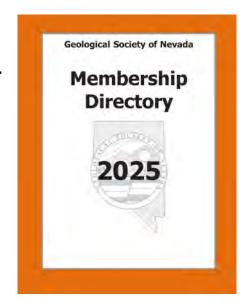
The **course fee** is \$3,500 for early registration (before November 11) and \$3,700 for late registration (after November 11). Please note that the <u>registration deadline</u> is **November 29, 2024**.

#### HAVE YOU RESERVED AD SPACE IN THE GSN 2025 MEMBERSHIP DIRECTORY YET!

The annual GSN 2025 Membership Directory will be coming together in the next month or two which means it's time to submit an ad! The GSN mails the directories to over 800 members each January. For many geologists, the directory is a quick resource to find current contact information for over 1,200 GSN members including friends, colleagues, service companies, students, government officials, etc.

Advertising in the directory is a terrific way to maximize your exposure in the community and help support the Geological Society of Nevada! The black & white ads appear in the "Gold Pages" and are are available in four sizes: Business Card for \$50, 1/4 page for \$150; 1/2 page for \$300, and a full page for \$450.

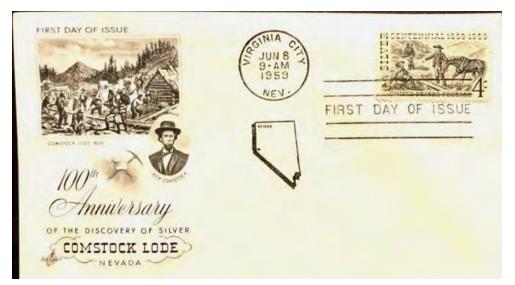
Purchase your ad here now and thank you in advance for supporting the GSN through your advertising!



# **PURCHASE AD**

#### ROCKETATIK

Dave Emmons, long time GSN member and GSN President 2012-2013, thought the GSN members may be surprised that there was a 1959 U.S. postage stamp celebrating the 100th anniversary of the discovery of the Comstock Lode and Virginia City. Dave and his wife Denise moved to Leander, Texas after retirement but they both still keep their GSN membership current!





I found this one for sale on Ebay for only \$3.99!

## Mining Activity Update

SEPTEMBER 2024, Mike Brady

LMBrady@aol.com

#### **NEVADA**

Giant Mining Corp. announced that recent drill results at the Majuba Hill Project includes 0-66.4 meters @ 1.35% Cu, 73.4 gpt Ag, 0.07 gpt Au (MHB-30). *Press Release:* September 24

StrikePoint Gold Inc. announced that it acquired the Hercules Property from Elevation Gold Mining Corp. for \$250,000 cash. *Press Release:* September 3

Getchell Gold Corp. announced that based on recent drill results at the Fondaway Canyon Project, resources aggregate 13,518,000 tonnes @ 1.49 gpt Au indicated and 44,829,000 tonnes @ 1.16 gpt Au inferred. (was 11,000,000 tonnes @ 1.56 gpt Au indicated and 38,300,000 tonnes @ 1.23 gpt Au inferred) *Press Release:* September 11

Nevada King Gold Corp. announced that it acquired the Silver Park Property from Ofer Silver LLC. for 100,000 shares. *Press Release:* September 12

Nevada King Gold Corp. announced that recent drill results at the Atlanta Project include 15.4-69.2 meters @ 4.10 gpt Au, 32.9 gpt Ag (AT23NS-120C); 149.4-190.5 meters @ 2.25 gpt Au, 100.3 gpt Ag (AT23NS-164); 155.5-205.8 meters @ 1.29 gpt Au, 108.5 gpt Ag (AT23NS-165) and 118.9-154.0 meters @ 3.59 gpt Au, 37.1 gpt Ag (AT23NS-171). (resource = 11,000,000 tonnes @ 1.3 gpt Au measured+indicated) *Press Release:* September 23

Lion Copper and Gold Corp. announced that recent drill results at the Yerington Project include 0-127.7 meters @ 0.12% Cu (YM-47); 173,6-258.2 meters @ 0.21% Cu (YM-48) and 70.4-82.3 meters @ 0.12% Cu (YM-49). *Press Release:* September 9

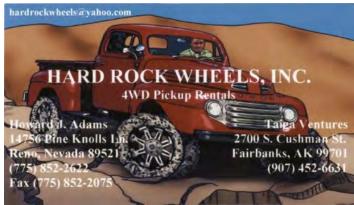
Lion Copper and Gold Corp. announced that recent drill results at the MacArthur Project include 30.5-39.6 meters @ 0.21% Cu (QM-336); 76.2-100.6 meters @ 0.14% Cu (QM-338); 53.3-96.0 meters @ 0.22% Cu (QM-340) and 57.9-77.7 meters @ 0.22% Cu (QM-344). (resource = 273,000,000 tonnes @ 0.17% Cu measured+indicated) *Press Release:* September 9

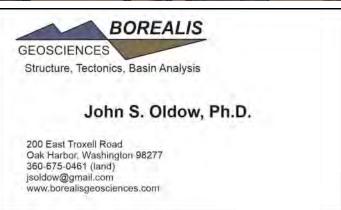
Surge Battery Metals Inc. announced that based on recent drill results at the Nevada North Project, resources aggregate 701,400,000 tonnes @ 0.648% Li2O inferred. (was 309,300,000 tonnes @ 0.611% Li2O inferred) *Press Release*: September 24

Nevada Lithium Resources Inc. announced that recent drill results at the Bonnie Claire Project include 8-136 meters @ 0.209% Li2O, 0.14% B (BC2401C) and 398-856 meters @ 0.678% Li2O, 0.96% B (BC2401C). (resource = 3,047,000 tonnes @ 0.217% Li2O inferred) *Press Release:* September 10

Ioneer Ltd. announced that the Bureau of Land Management released a favorable Environmental Impact Statement for the Rhyolite Ridge Project with stipulations. The US Fish and Wildlife Service also stated the project would not jeopardize the Tiehm Buckwheat. The EIS must now be reviewed by the public prior to any Record of Decision being issued. (reserve = 60,200,000 tonnes @ 0.387% Li2O, 1.54% B proven+probable) *R.G.J.:* September 26

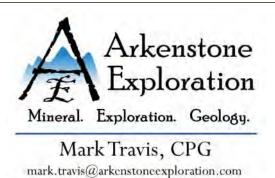
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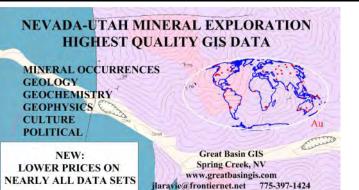
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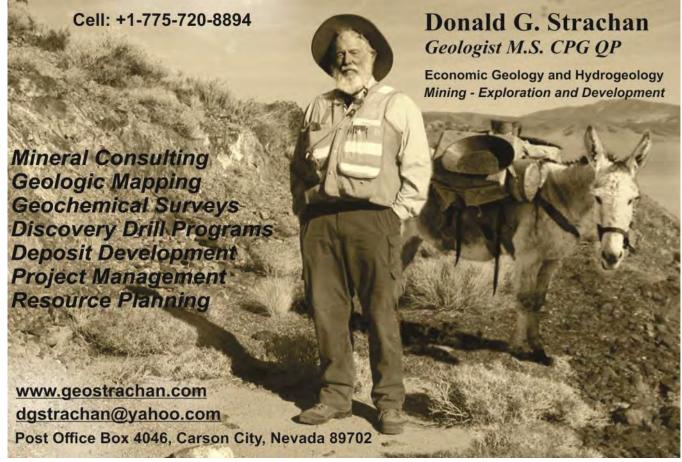


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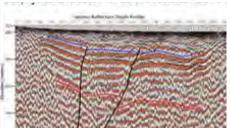


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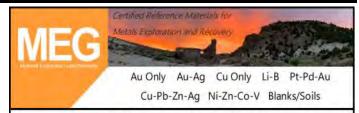


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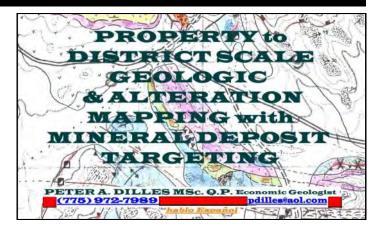
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#### IT'S GSN DUES RENEWAL TIME

## **DUES ARE STILL ONLY \$50/YEAR**

(\$80 FOR A PAPER NEWSLETTER)

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Thank you for renewing your membership in the GSN for FY 2025! If you haven't paid your dues yet, you can continue to renew up until the Directory is drafted. You can find out your actual renewal date by going to the GSN website (<a href="https://www.gsnv.org/membership/">https://www.gsnv.org/membership/</a>) and clicking on "My Account" to login, then clicking on "Membership Details". The site gives you the option to reset your password if you don't know it. Please contact the GSN office if you don't know your user name. If your dues expire, it does not automatically take you off the email list. That happens in November each year so please make sure you renew by then. THANK YOU!

ALSO, MEMBER DIRECTORY ADS CAN BE PURCHASED ON THE WEBSITE HERE: 2025 DIRECTORY AD

#### **GEOLOGICAL SOCIETY OF NEVADA**



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