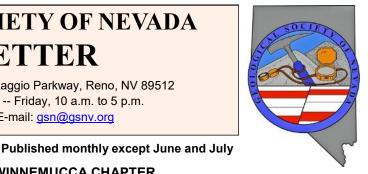


GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

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



NOVEMBER 2023 ISSUE, Vol. 39, No. 9

NOV. 8. 2023

WEDNESDAY

GSN WINNEMUCCA CHAPTER

The GSN Winnemucca Chapter meeting will be held at the Martin Hotel, 94 W. Railroad St. SPEAKER: Joseph A. Laravie. TITLE: "The Geo-Physical Continuum: An Introduction to Mineral Exploration Geophysics for Geologists". SPONSOR: PREMIER DRILLING CO. For more information, please contact Chapter President, Kris Alvarez at: kalvarez@i80gold.com. Details on pg 5.

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NOV. 16, 2023 **THURSDAY**

GSN ELKO CHAPTER

The GSN Elko Chapter will hold their meeting at the Western Folklife Center, 501 Railroad St. Elko. SPEAKER: Kris Alvarez, i80 Gold. TOPIC: Granite Creek Mine - Pitfalls, Promise Renewing an Old Mine. SPONSOR: MAJOR DRILLING. Please contact Elko President, Luke Schranz, lukeschranz@gmail.com for more information. Details on page 6.

NOV. 17. 2023 **FRIDAY**

GSN REGULAR MEMBERSHIP MEETING

The GSN meeting will be held at the Atlantis Hotel & Casino. SPEAKER: Dr. Simon Jowitt, Director of the CREG program at UNR. TITLE: "Metal Supply and Demand, Critical Metals and Nevada: Opportunities and Challenges". 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 13TH.

DEC. 13, 2023 WEDNESDAY



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 4 for details.

GSN RENO MEETING SPONSOR



FROM THE PRESIDENT Tony Gesualdo, GSN President 2023-2024 NOVEMBER 2023



There is a crispness in the air and fall is here. We have seen a little snow in the mountains and freezing temperatures in Reno in the last weeks. The GSN Foundation Holiday Party is scheduled for Wednesday, December 13th at the Nugget in Reno, so mark your calendars. A big thank you to Paragon Geochemical: they will be accepting and holding any donations for the raffle/auction (see page 4 for details).

There was a beautiful annular eclipse in mid-October, and hopefully many of you were able to see it through the clouds. We camped in a great spot to wake up and see it on the morning of October 14th. It is amazing watching our 3-year-old experience natural phenomena for the first time. The eclipse was a lot to wrap her head around; but it was fun and exciting for her, and she knew it was special. We were relieved when she finally decided to keep the eclipse glasses on and understand the change in the sun's appearance. The next nearby total eclipse will be in April 2024, which will pass over the middle of the country.

The Fall Field Trip on October 21-22nd was a big success. Our monthly meeting tied directly into the field trip, as Wyatt Bain took attendees to the Mineral Basin District to show us some of the deposits and textures he discussed at the monthly meeting on Friday night. On Sunday, Buster Hunsaker and Molly Richardson led us through the intriguing Majuba Hill Copper Exploration Project. Kudos to field trip organizer Patty Capistrant and all involved for

putting together a great trip and informative guidebook. I heard many compliments during and after the trip.

For our November meeting, we are excited to welcome Dr. Simon Jowitt as our speaker. He has been a professor of economic geology in Nevada for a while, but recently moved from UNLV to UNR as the new Director of the Ralph J Roberts Center for Research in Economic Geology. His talk is titled "Metal Supply and Demand, Critical Metals and Nevada: Opportunities and Challenges" and will be discussing the metals/mining quandary that we currently face as society grows and transitions to an updated energy regime.

Cheers,

Tony



Field trip attendee examining magnetite in the Ford Pit, Pershing County, Nevada. Every year the geologists on the field trips look younger and younger....

GSN wishes to thank our OCTOBER meeting sponsors!







GSN MEETING in RENO—FRIDAY, NOVEMBER 17, 2023

GUEST SPEAKER: DR. SIMON JOWITT, Director of CREG

TITLE: "Metal Supply and Demand, Critical Metals and Nevada: Opportunities and Challenges"

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

DINNER COST: \$60. Please RSVP online by 5 PM on Monday, November 13th: **DINNER RESERVATION**

Abstract:

Humanity mines more metals and minerals than at any other point in our history, and mining is vital to modern life, maintaining expected standards of living, providing the raw materials required by a range of industries such as manufacturing and farming, and much more. However, despite these record rates of production the overall demand trends for mined metals and minerals continue to generally increase even coincident with increasing amounts of recycling of some metals. This increasing demand is being further impacted by the energy transition to low- and zero-CO2 energy generation, energy storage, and transport, which is already accelerating demand for a variety of different metals and minerals. These metal and mineral demands are being driven by moves toward effective climate change mitigation as well as consumer demands and investment. All of this indicates that the next few decades will require more mining than already current record levels of production, especially of a range of metals and minerals that are considered critical by governments and associated bodies, governmental departments and individual organizations. There is also significant potential for supply and demand imbalances for a range of these critical metals, reflecting the low volumes of production of some of these commodities as well as uncertainties over future supply and demand. The fact that a range of critical metals and minerals are produced as byproducts of other metals also reduces their security of supply and makes increasing production of these byproduct critical commodities difficult. In addition, the low recycling rates of a significant number of critical metals also means that achieving circular economies when sufficient amounts of these metals are present in the economy as in-use stocks and thus are available for recycling remains problematic. This presentation will provide an overview of the importance of mining to modern society, explain what we mean by critical metals and minerals, outline the metal and mineral supply challenges presented by climate change mitigation, and discuss how we can balance the need for climate change mitigation and the demand for technologies such as electric vehicles, solar panels, wind turbines and upgraded electrical grid systems with the challenges associated with supplying the metals and minerals that these needs require. Additional discussion will focus on the likely impact of the energy transition on metal demand and mining, the increasing impact of environmental, social and governance/governmental (ESG) factors on mining, and the challenges and opportunities for the minerals industry globally and in Nevada.

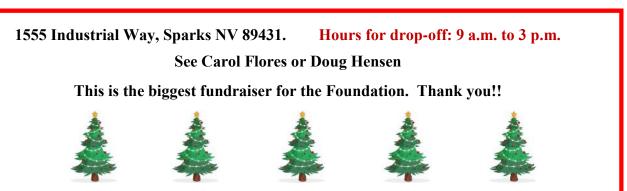


Bio: Simon Jowitt is currently the tenured Director of the Ralph J. Roberts Center for Research in Economic Geology and the Arthur Brant Chair of Exploration Geology at the Nevada Bureau of Mines and Geology, University of Nevada Reno, Reno, Nevada, USA. He has a BSc (Hons) degree in Geology from the University of Edinburgh, an MSc in Mining Geology from the Camborne School of Mines, and a PhD from the University of Leicester, all in the UK. Simon spent eight years at Monash University in Melbourne, Australia, initially as a three-year postdoctoral research fellow working with Anglo American before moving to spend seven years as an Assistant and then tenured Associate Professor of Economic Geology at the University of Nevada, Las Vegas. His research focuses on the use of geochemistry to unravel geological processes in a variety of settings with direct application to understanding not only mineralizing systems but also igneous petrology, mineral exploration, global tectonics and the links between magmatism and metallogeny. He has also undertaken extensive research on mineral economics, global metal resources and the security of supply of the critical elements, and the "economic" side of economic geology, as demonstrated by a number of recent publications on global base, precious, and critical metal and mineral resources and the impact of the energy transition and COVID-19 on the global minerals industry. Simon also studies the environmental impact of mining and the potential uses of mining and other wastes for base and critical metal production and CO2 sequestration. He has published more than 110 scientific papers and peer-reviewed book chapters since 2010, is currently the Vice-President for Student Affairs for the Society of Economic Geologists (SEG) and was awarded the SEG's Waldemar Lindgren Award in 2014.

NEWS FROM THE FOUNDATION

November, 2023 Bob Felder

The Foundation Christmas party fundraiser is planned for Wednesday, December 13 at the Nugget. Mark your calendars for fun, festivities and friendship. Now is the time to think about donations for the raffle and silent auction. The most popular items in past years have been wine, jewelry, art, antiques (especially of a mining or scientific nature), liquor, gift cards, gift baskets and of course mineral specimens! Every year we have books that are not picked up at the end of the evening – please consider if the books you want to donate are truly collectible or rare. Please leave a business card with your donation so we can appropriately acknowledge your gift. **Paragon Geochemical** has agreed once again to take items for donation at their office.



More exciting news from the Foundation! Following a solicitation to GSN for donations of school supplies from a Washoe County elementary school teacher, an anonymous GSN member donated \$10,000 to the Foundation with instructions to use this money for the purchase of much needed school supplies for Washoe County schools. Title 1 schools were targeted and 53 principals were contacted. A Title 1 school is a designation for schools within low-income areas which likely have the largest need. The principals distributed our notification and application form to their teachers, and we quickly received 79 applications in only a few days. The Foundation gave out \$250 awards to 40 teachers from 11 schools. The table below shows the distribution of funds to the selected schools.

School	Awards	Total
Agnes Risley Elementary	4	\$1000
Bernice Mathews Elementary	4	\$1000
Desert Heights Elementary	1	\$250
Donner Springs Elementary	5	\$1250
Encompass Academy High School	5	\$1250
Hug High School	7	\$1750
Kate Smith Elementary	3	\$750
Katherine Dunn Elementary	5	\$1250
Nancy Gomes Elementary	2	\$500
Rita Cannan Elementary	3	\$750
Robert Mitchell Elementary	1	\$250
Total	40	\$10,000

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 Christmas party fundraiser and from generous donations from our members. Thank you!!



GSN WINNEMUCCA CHAPTER NEWS



Please join us for the Winnemucca GSN November Meeting Wednesday, November 8, 2023 The Martin, 94 W. Railroad St. Food and Drinks at 6 pm, Talk at 7 pm

Speaker: Joseph Laravie, Great Basin GIS

Title: "The Geo-Physical Continuum: An Introduction to Mineral Exploration Geophysics for Geologists"

FOOD & BEER SPONSOR: PREMIER DRILLING CO.



Geologists describe rocks using lithology, alteration, color, texture, and structure, among other things. Geological observations are limited to the earth's surface and drill holes. Interpretations of geology far from these observation areas are necessarily speculative. Geophysical techniques can observe areas far from the surface and between drill holes, but do not detect these same geological characteristics. They can "see" only bulk physical properties, such as density, electrical resistivity, seismic velocity, and others. Geophysical techniques are also limited by "poor vision", including limited detection distance, sensitivity, resolution, and masking.

Density is the most easily understood physical property. It is controlled primarily by mineralogy, pore space, and pore fluid. Denser minerals, less pore space, and existence of a pore fluid all contribute to higher density. Density is detectable using gravity surveys, in which minute variations in earth's force of gravity are measured at the earth's surface, in drill holes, or from aircraft, and interpreted to estimate earth's density in 2 or 3 dimensions over a limited region. Gravity surveys are typically used to estimate sedimentary basin thickness, or detect the presence of large masses of differing density. Local gravity surveys can detect the presence of volcanogenic massive sulfide (VMS) deposits due to the higher density of sulfide minerals relative to host rocks.

Electrical resistivity is the resistance of earth materials to the flow of electricity, principally alternating current within the audio-frequency range. Resistivity is controlled by mineralogy, mineral spatial relationships, porosity, and pore fluid types. Metallic-luster minerals, clay minerals, increased pore space, and conductive (salty) pore fluids decrease resistivity. Resistivity is detectable using several different geophysical techniques that involve injecting electrical current or magnetic fields into the earth. Resistivity surveys can detect VMS deposits, and can also be used to map a wide range of resistivity in three dimensions over entire project areas.

Chargeability is the ability of the earth to briefly store an electrical charge. This physical property is caused by disseminated metallic-luster minerals, The magnitude of the effect is more-or-less proportional to their surface area, thus finer grain size tends to maximize the effect. Chargeability is detectable using "Induced Polarization" (IP) surveys that inject electrical current into the earth. IP surveys are most commonly used in the exploration for porphyry copper deposits, but can also used in other settings where sulfides are important.

Magnetic Susceptibility is a property whereby a non-magnetic material can locally modify a vector magnetic field (normally Earth's field) that it is immersed in. This has the effect of causing local variations in Earth's field. Magnetite is the primary mineral that shows this effect. Pyrrhotite also possesses a weaker version of this physical property.

Magnetic Remanence is the physical property whereby minerals are naturally magnetic and possess a local magnetic field, with north and south poles, the same as a household bar magnet. This local magnetic field combines with (adds to) Earth's dipole vector field creating local variations. These local effects can add to or subtract from the anomalies created by magnetic susceptibility. Both magnetite and pyrrhotite can possess magnetic remanence, but it can be strong, weak, or undetectable. The combined effect of both magnetic susceptibility and remanence are measured using hand-held or airborne magnetometers, Magnetic surveys are extremely useful in the search for magnetic iron ore, and also for general geological mapping in rocks that have only low concentrations of magnetite.

Seismic Velocity is the speed of sound within the earth. While the speed can be measured directly, discontinuities and boundaries between layers of different seismic velocity are easier and more (Winnemucca News continued on page 6)

commonly detectable. This effect is detectable by sequentially injecting sound energy into the earth in an array of locations, and detecting the response at the earth's surface at many points in their vicinity. Seismic surveys are highly developed in the petroleum industry, but are less common in mineral exploration, due to high cost and other factors.

The earth's surface emits natural gamma rays due to the presence of uranium, thorium and potassium. Each element (daughter products for U and Th) emit gamma rays of different energies. These can be detected and differentiated by gamma-ray spectrometers, some of which are small hand-held instruments, or larger more sensitive systems for airborne surveys. The most common use is as down-hole instruments in uranium exploration and development. Natural gamma rays penetrate only a very short distance (several feet) in soil, less in rock, severely limiting their 3-D utility.

Notes from previous meetings

A big thank you to Quentin Burgess, who braved his COVID illness and gave our October talk via Zoom, and to <u>Marc Bardoux</u> for bringing the Montreal <u>Society of Economic Geologists</u> Student field trip students to GSN Winnemucca talk at the end of their field trip! Best night ever! And thanks <u>David Shaddrick</u> for hosting the after talk party! It is always great to meet new geologists, especially when they are international.

Our December meeting will feature Rachel Hampton of Lithium Americas discussing lithium deposits near the McDermitt Caldera. We intend to have a silent auction so get your donations ready - several supporting companies will also be providing nifty geologically oriented gifts for the auction to provide for your holiday gift giving. The date is tentatively December 13th unless we can secure another date that doesn't conflict with the Foundation party.



GSN ELKO CHAPTER NEWS



Please join us for the Elko Chapter Meeting

Thursday, November 16, 2023
Food and Drinks @ 6 p.m., Talk to begin @ 7 p.m.
WHERE: Western Folk Life Center, Elko, NV

SPEAKER: KRIS ALVAREZ, i80 GOLD

TOPIC: Granite Creek Mine - Pitfalls, Promise Renewing an Old Mine

FOOD & DRINKS SPONSOR: MAJOR DRILLING



Our Christmas party/scholarship fundraiser silent auction will be held on Friday, December 15th and will begin at 6pm. Our sponsors are Boart-Longear and Legarza Exploration. We are still working on securing a speaker for that meeting.

Please contact GSN Elko President. Luke Schranz for more information.

GSN 2023 Fall Field Trip Wrap Up

Unique Base Metal Mineralization in Northern Nevada

Patty Capistrant, GSN V.P. and Field Trip Leader

The 2023 GSN Fall Field took place from October 20-22, 2023, and proved to be an informative and captivating experience for all participants (even our smallest geo, Gaia, who noted the Carson Sink was "the best place in the world"). The event started on Friday night, rolled into the monthly GSN Meeting, where Dr. Wyatt Bain spoke to a fascinated crowd about differences between iron oxide-copper-gold and iron oxide-apatite systems. The next morning, our group of 45 headed out into the Carson Sink to look at the Buena Vista Hills, a historic iron ore district. Dr. Bain provided overviews at each stop shedding light onto processes responsible for different ore shapes and mineral formation, with a constant question arising: Magmatic? Hydrothermal? Or a little bit of both? Participants also had the opportunity to collect monster mineral specimens of magnetite, apatite, scapolite, and titanite (aka sphene)!

Saturday evening, we ate some good old fashioned Basque food at the Martin Hotel in Winnemucca, and the door prizes were presented by our second youngest attending geo: Khor (Don Strachan's grandson). Buster Hunsaker gave a presentation on the updated geologic understanding of the Majuba Hill copper porphyry project, which suggests protracted magmatic input from the Jurassic, Cretaceous, Eocene, and Oligocene! The main takeaway was that with a little more drilling, the exploration target mineralization can move into a resource category, and it seems like it can only grow from here!

Sunday morning, I nearly forgot to get lunch from the refrigerator of the Model T restaurant, but after that we were off without a hitch, and we made our way out to Majuba Hill. Molly and Buster gave us an overview before driving up to the middle adit, where core was laid out for observation, and a walking tour up steep drill roads allowed unencumbered conversation about geologic processes. The tour wrapped up mid-afternoon, and the lot of us drove back to Reno, hopefully a little smarter than when we left!

Thank you to Buster Hunsaker, Molly Richardson, and Wyatt Bain for volunteering your time and making this a worthwhile weekend. And thank you to our field trip sponsors: Ruen Drilling, Envirotech Drilling, Boart Longyear, ALS Minerals, American Assay Laboratories, Premier Drilling, and Great Basin GIS.

If you'd like to visit these areas on your own, field trip guides are available from the GSN. Call 775-323-3500.



Photo of GSN talk on Friday night by Dr. Wyatt Bain



Photo of Justin Milliard looking at iron ore at the Ford Pit, Buena Vista Hills.

Fall 2023 Field Trip Wrap Up (cont. from page 7)



Geos scattered looking for good scapolite specimens at Buena Vista Hills.



Field trip participants look for specimens of titanite, apatite, and magnetite in the Buena Vista mine dump.



Presentation by Buster Hunsaker on Saturday night at the Martin Hotel.



Walking tour at Majuba Hill with participants taking in the rocks at their own pace.



Eric Ruud investigating native copper in Majuba drill core.



Group photo of all the participants of the GSN 2023 Fall Field Trip.

Thank you to our field Trip Sponsors





Envirotech Drilling LLC





IT'S GSN DUES RENEWAL TIME

DUES ARE STILL ONLY \$50/YEAR

(\$80 FOR A PAPER NEWSLETTER)

LIFETIME DUES ARE \$1,250-NEVER WORRY ABOUT PAYING AGAIN!

Thank you for renewing your membership in the GSN for FY 2024! 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 (https://www.gsnv.org/membership/) 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: 2024 DIRECTORY AD

Mining Activity Update

SEPTEMBER 2023, Mike Brady

LMBrady@aol.com

NEVADA

Anglo Gold Ashanti Ltd. announced that recent drill results at the Silicon/Merlin Project include 342-556 meters @ 1.19 gpt Au (MD-1); 425.2-592.8 meters @ 0.82 gpt Au (MD-17); 448.1-662.9 meters @ 2.46 gpt Au (MDT-21) and 284.1-569.1 meters @ 3.27 gpt Au (MER23-147RD). (resource = 121,560,000 tonnes @ 0.87 gpt Au indicated) *Press Release:* August 8

Orogen Royalties Inc., the holder of a 1.0% NSR on the Silicon-Merlin Property of Anglo Gold Ashanti Ltd. states in a recent press release that Anglo has reported the Merlin Zone (1.0 km south of Silicon) now has a separate size potential of 230-250,000,000 tonnes @ 0.8-1.0 gpt Au inferred. *Press Release:* August 8

I-80 Gold Corp. announced that recent drill results at the Ruby Hill Project include 187.5-208.8 meters @ 1.1 gpt Au, 74.6 gpt Ag, 0.4% Pb, 0.1% Zn (iRH23-19); 187.5-193.5 meters @ 1.1 gpt Au, 121.5 gpt Ag, 3.0% Pb, 0.3% Zn (iRH23-22); 320.7-334.7 meters @ 0.7 gpt Au, 235.5 gpt Ag, 5.7% Pb, 7.0% Zn (iRH23-26) and 597.4-613.8 meters @ 0.9 gpt Au, 59.8 gpt Ag, 0.8% Pb, 17.8% Zn (iRH23-29). (resource = 2,818,000 tonnes @ 5.46 gpt Au, 9.5% Zn, 3.7% Pb, 188 gpt Ag inferred) *Press Release:* August 24

Lincoln Gold Mining Inc. announced that it is in negotiations to acquire the Bell Mountain Property from Eros Resources Corp. (resource = 2,662,000 tonnes @ 0.61 gpt Au, 15.9 gpt Ag measured+indicated) *Press Release:* August 10

Contact Gold Corp. announced that recent drill results at the Green Springs Project include 89.92-115.82 meters @ 1.90 gpt Au (GS23-10); 85.34-97.54 meters @ 1.41 gpt Au (GS23-11) and 85.34-96.01 meters @ 1.67 gpt Au (GS23-12). (resource = 754,500 tonnes @ 2.05 gpt Au inferred) *Press Release:* August 17

Calibre Mining Corp. announced that recent drill results at the Pan Project include 53.34-65.53 meters @ 0.91 gpt Au (PR23-117); 67.06-86.87 meters @ 0.41 gpt Au (PR23-119); 99.06-112.78 meters @ 0.52 gpt Au (PR23-121) and 100.58-103.63 meters @ 0.78 gpt Au (PR23-129). (reserve = 19,788,000 tonnes @ 0.37 gpt Au proven+probable) *Press Release:* August 1

Summa Silver Corp. announced that recent drill results at the Hughes Project include 480.8-483.7 meters @ 8.40 gpt Au, 813 gpt Ag (SUM23-59) and 413.0-414.5 meters @ 2.56 gpt Au, 175 gpt Ag (SUM23-62). *Press Release:* August 2

BABY ANNOUNCEMENTS!

Kennedy Lynn Larson was born October 7, 2023 at home in Boise, Idaho to Samantha and Kyle Larson. She was 21 inches tall and weighed 7 pounds 14 ounces. Kennedy joins her three siblings, Sydney Elsdon (*March 2018 GSN Newsletter*), Isabel Elaine (*September 2019 GSN Newsletter*) and John Graydon (*August 2021 GSN Newsletter*).



It's time to get your ads into the GSN 2024 Directory! (Order online at the link below or print this form and mail it with a check.)



GEOLOGICAL SOCIETY OF NEVADA

2024

2175 Raggio Parkway, Room 107 • Reno, NV 89512

Phone (775) 323-3500

Email: gsn@gsnv.org; Website: www.gsnv.org

Offices are located at NBMG's Great Basin Science Sample and Records Library at The Desert Research Institute Campus, 2175 Raggio Parkway, Room 107, Reno, Nevada 89512

Office hours: 10:00 AM - 5:00 PM, Monday through Friday.

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All advertisements must be camera ready, black and white, or submitted by email as a TIFF or JPG digital format (PDFs are acceptable but may need to be adjusted for MS Publisher). Please send your advertisement and check (payable to G.S.N.) by December 8th to: GSN, 2175 Raggio Parkway, Reno, NV 89512, OR pay online with a credit card on the GSN website link:

AIPG Exploration Roundup

The AIPG Exploration Round-up will be held on **Tuesday, December 12th at 6:00 PM, at the Atlantis Hotel in Reno.** We will have speakers from seven mining and exploration companies on the program and a mineral specimen raffle as well.

Please contact Kel Buchanan for more information at:

775 786-4515 or summitcrk@aol.com.



November 2, 2023 Nevada Petroleum & Geothermal Society meeting, Please join us on Thursday November 2, at 6:30 pm for the monthly meeting at Tamarack casino 13101 S Virginia St, Reno, NV 89511. This month's speaker will be **Dustin Holcomb from Nevada Division of Minerals and Tai Subia from BLM Nevada**. The event will begin with an open bar at 6:30 PM, followed by dinner at 7 pm and presentation at 7:30 PM. click here to register: Register Now. Contact Luis Navarro for more info: 832-707-2778 or email energygeologist@gmail.com

November 6, 2023 DREGS Meeting at Colorado School of Mines, Berthoud Hall Room 108. Speaker: Dr. Chuck Thorman, USGS Retired. Title: "Basin & Range Geology: Evolution of thinking from 1920 to 2020". Social hour 5:30—6:30 p.m. Presentation begins at 6:30 p.m. Zoom link — https://us06web.zoom.us/j/3688010347. Meeting ID: 368 801 0347

November 6-9, 2023: Alaska Miners Association Convention & Trade Show. "MINERS FOR GENERATIONS" AMA's Annual Convention and Trade show will be at the Dena'ina Center and the Anchorage Marriott Downtown Hotel. The Convention begins on Monday, November 6, 2023, and will conclude on Thursday, November 9, 2023. Click the link for more information: http://www.alaskaminers.org/convention

November 7, 2023 Arizona Geological Society Speaker Series 2023 via Zoom. Speaker: Jon Stuart, Adjunct Researcher, University of AZ. Title: "Cenozoic Tectonic Extension in the Mojave-Sonora Desert Region". Location: Hexagon Mining Division Office, 40 East Congress St, Suite 150, Tucson, AZ. Parking on the street or parking garage (Old Pueblo Parking). Social Hour with Sandwiches from Beyond Bread (5:30-6:30 PM) Presentation (6:35 PM). For those planning to attend the event, please register by 6:00 PM on Sunday, November 5, 2023. For those unable to attend, the remote broadcast begins at 6:35 p.m. No registration or fee to attend remotely. Streaming URL coming soon.

<u>December 3-8, 2023:</u> American Exploration & Mining Association Annual Meeting "MINING MEETS THE MOMENT—WHICH IS NOW". Nugget Casino Resort, Reno/Sparks, NV. Click the link for more information and to get registered: https://www.miningamerica.org/annualmeeting/ GSN WILL BE IN BOOTH #575 THIS YEAR! Contact Laura at the GSN office if you'd like to volunteer help.

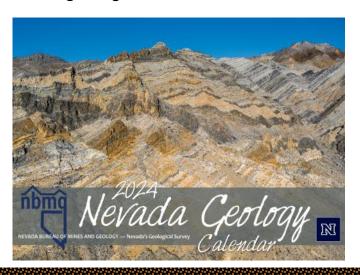
<u>December 13, 2023</u>: <u>GSN HOLIDAY PARTY AND FUNDRAISER</u> Mark your calendars now and get ready to take part in the Silent Auction and Raffle by donating a prize! See page 4 for details.

The Nevada Geology Calendar 2024 is available for pre-orders!

https://pubs.nbmg.unr.edu/Nevada-geology-calendar-2024-p/cal2024.htm

COMING SOON!

The price is \$12 each for 1-9 copies. Quantity discounts for 10 or more are available in the cart. These beautiful calendars make great Christmas presents for your family, friends, office or your favorite geologist!



ROCK TALK



Gold Price Surpasses \$2,000 Again

By Rob Bates—October 30, 2023
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The price of gold has crossed the all-important \$2,000-an-ounce benchmark for the second time this year.

Gold closed at \$2,006 an ounce on Friday, Oct. 27, according to goldprice.org. At press time on Monday, it was trading just below \$2,000, at \$1,999.48 an ounce.

The price rise has been attributed to current international instability, as the price of gold has jumped 9% since the Oct. 7 terrorist attacks in Israel.

"Gold has a unique status among assets, because its price often increases with rising geopolitical concerns," said a World Bank outlook report on commodity markets. "In the event of a more widespread conflict in the Middle East, gold prices would likely increase from already high levels as investors shift to safe-haven assets."

In March, gold had crossed the \$2,000 mark amid turmoil in the banking sector, sparked by the failure of Silicon Valley Bank. Gold prices exceeded \$2,000 per ounce for the first time in history in 2020.



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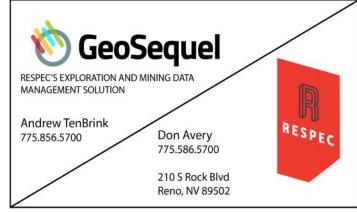
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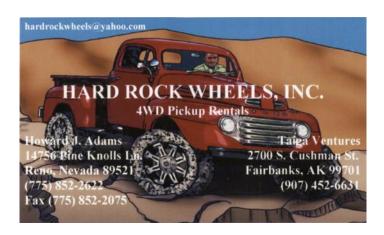
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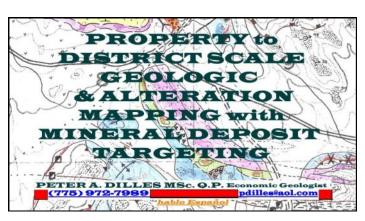
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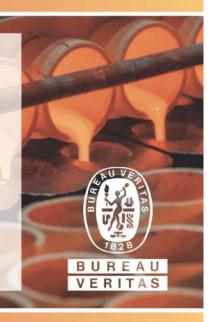
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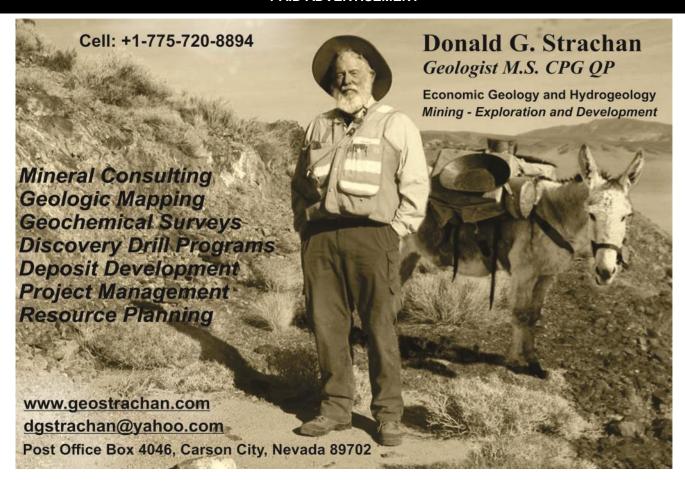
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The tholeiitic basalt columns of the Giants Causeway in Northern Ireland formed during the opening of the North Atlantic Ocean approximately 50 million years ago, when the lava flow filled a sagging depression formed by magma withdrawal from below.



