

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: <u>www.gsnv.org</u> • E-mail: <u>gsn@gsnv.org</u>



DECEMBER 2023 ISSUE, Vol. 39, No. 10

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DEC, 13, 2023 WEDNESDAY



DEC. 14, 2023

(Note Change!)

THURSDAY

The GSN's annual holiday meeting and Foundation Fundraiser will be held at the Nugget Casino Resort, CASCADE BALLROOM, Sparks, NV. **GUEST SPEAKER: Lew Kleinhans. TITLE: "Tales of Two Canyons, a Red River and Oysters" DRINKS SPON-SOR: ENVIROTECH DRILLING, LLC. Dinner cost is \$70 per person. Raffle tickets are \$1 each.** Please register for dinner online by clicking the link: <u>DINNER RESERVATION</u> or RSVP to Laura Ruud: <u>gsn@gsnv.org</u>. **PLEASE Register or RSVP by FRI-DAY, DECEMBER 8TH!** Details on Pg. 3.

GSN WINNEMUCCA CHAPTER MEETING & FUNDRAISER!

Published monthly except June and July

GSN HOLIDAY MEETING, SILENT AUCTION & RAFFLE!

The GSN Winnemucca Chapter Holiday Meeting & Silent Auction Fundraiser will be held at the Martin Hotel, 94 W. Railroad St. **SPEAKER: Rachel Hampton, Lithium Americas. TITLE:** *"Exploration and Development at the Thacker Pass Lithium Claystone Deposit, Northern NV: Unlocking a Domestic Energy Revolution".* FOOD & BEER SPONSOR: HECLA NEVADA MINING COMPANY For more information, please contact Chapter President, Kris Alvarez at: <u>kalvarez@i80gold.com</u>. Details on pg 7.

DEC. 15, 2023 FRIDAY (Note Change!)

GSN ELKO CHAPTER MEETING & SILENT AUCTION!

The GSN Elko Chapter will hold their Holiday Meeting & Silent Auction Fundraiser at the Western Folklife Center, 501 Railroad St. Elko. **SPEAKER: Peter Dilles, Consulting Services. TITLE:** *Onça Pintadas of the Pantanal Reserve, Mato Grosso, Brazil* (spotted jaguars!). **SPONSOR: BOART LONGYEAR & LE-GARZA EXPLORATION.** Please contact Elko Vice President, Sergey Konyshev, <u>sergey606@gmail.com</u> for more information. Details on page 8.

GSN RENO MEETING SPONSOR





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



Winter weather is here and so are all the heart-warming festivities. The GSN Foundation Holiday Party is scheduled for Wednesday, December 13th at the Nugget in Reno. The following nights will be the Winnemucca Chapter Holiday Party (Thursday, December 14th), and the Elko Chapter Holiday Party (Friday, December 15th). Tuesday, December 12th happens to be the AIPG Exploration Roundup at the Atlantis Hotel, which features short talks from seven different companies regarding their exploration activities. Anyone willing and able to make the full sweep, we congratulate you in advance!

Each GSN party will feature raffles and silent auctions to benefit the Foundation or the individual Chapters so, in the giving spirit of the season, please donate items. You can drop off items for the Foundation Party at Paragon Geochemical, who will accept and hold the items until the event. Likewise, you can contact Winnemucca Chapter Secretary, Eli Witte, for donations to the Winnemucca Chapter and/or drop off donations at the Rangefront Office for the Elko Chapter. See announcements later in the newsletter for details on each event

Beyond the raffles, auctions, and good times, we will also have interesting talks at each meeting. In Reno, Lew Kleinhans, a 'semi-retired' exploration geologist and river runner, will be joining us for the Foundation Holiday Party and will be giving us an enjoyable and educational presentation on the Grand Canyon. In Winnemucca, Rachel Hampton of Lithium Americas will be talking about the Thacker Pass Deposit. And in Elko, Pete and Jeannette Dilles will be talking about spotted jaguars!



Post-Thanksgiving hike with family near Eugene, Oregon. Everything is covered in green except for the Sisters capped in snow reaching upward to the moon.

Cheers,

Tony



GSN HOLIDAY MEETING—DECEMBER 13, 2023 MEETING

Sponsor: Envirotech Drilling LLC

GUEST SPEAKER: Lew Kleinhans

TITLE: "Tales of Two Canyons, a Red River and Oysters"

TIME: Drinks/Raffle/Silent Auction @ 6 pm, Dinner @ 7 pm,

Live Auction @ 7:45 pm, Talk @ 8 pm

WHERE: NUGGET CASINO RESORT'S CASCADE BALLROOM, SPARKS, NV

DINNER COST: \$70 per person

ONLINE RESERVATIONS CAN BE MADE on the GSN WEBSITE by clicking this link: <u>DINNER RESERVATIONS</u>.

PLEASE RSVP/REGISTER NO LATER THAN FRIDAY, DECEMBER 8TH!

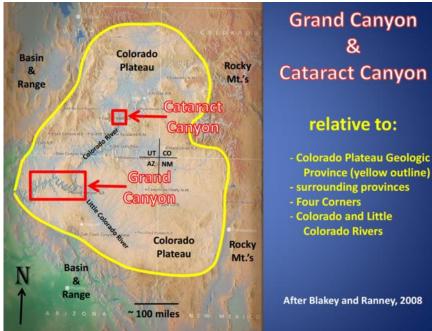
Abstract

Portions, albeit relatively short in duration, of over 2 billion years of geologic history are recorded in the canyons incised through the Colorado Plateau by the Colorado River, including Grand Canyon and Cataract Canyon, which will be the principal foci of this presentation. As modified from Karlstrom (italics)*, *"The* deep *time perspective that geology conveys is crucial for a sustainable future, as we grapple with many issues such as climate dynamism, extinctions, and resources - including water* AND human resources." These canyons are "bucket-list" destinations, which have, and continue to be, witnesses to, and agents of, profound change within their confines AND within those experiencing them... e.g., at-risk veterans. They are some of the world's premier outdoor laboratories, where, e.g., the distinction between observation and interpretation is critical, but sometimes elusive. This talk is designed to be mix of geology, history, adventure and "FUN", as well as, and in light of the festive and "giving" season in which we gather, a celebration and thanks for the magnificence and power of these Canyons and River.

* GRAND CANYON GEOLOGY AND GEOSCIENCE EDUCATION PUBLIC SYMPOSIUM, April 18-20, 2019; Grand Canyon Village, AZ

<u>Bio</u>

Lew Kleinhans is a "semi-retired" exploration geologist and river runner (geologists really don't ever retire), who stays busy now volunteering, prospecting, and leading geoscience-focused river trips through Grand and Cataract Canyons for other geoscientists, at-risk veterans and alumni associations. Armed with a focus on fluid flow, subsurface plumbing systems, and porosity / permeability, Lew has contributed to the exploration and development of minerals, petroleum and geothermal resources around the world. As a "Jersey Boy" with a B.S. in Geology from Rutgers University and a Ph.D. in Geology and Geophysics from the Colorado School of Mines, Lew has both marine and Rocky Mountain oysters in his blood. His email address (lewis.oysterclub@gmail.com) reflects the pride he takes in co-founding and perpetuating a modern version of the original, late 1700's Oyster Club of Edinburgh, Scotland, where a group including James Hutton, the "Father of Modern Geology", gathered to consume oysters and libations... and to talk science. It serves as a timely and critical reminder that Science is Collaborative. Lew currently lives in Golden, Colorado. He has one son, Xander, who was born in Java, Indonesia, and a Sweetheart, Lisa, of nearly six years.



Grand Canyon and Cataract Canyon relative to the Colorado Plateau (yellow outline), surrounding provinces, Four Corners, and the Colorado and Little Colorado Rivers. Note that the Colorado Plateau is roughly heart-shaped, with its apex pointing SW (downstream) and with its northern and southern lobes respectively occupied by the Colorado River and Little Colorado drainage basins. The latter positioning becomes useful when envisioning scenarios regarding the evolution of both the Colorado River and its canyons.

Faces of GSN ELIJAH TURNER Sparks, Nevada

I was born in Joplin, Missouri and grew up across the border in southeast Kansas, in the lead-zinc Tri State mining district. The mines were closed by the time I was born, and I never remember having much interest in them, aside from occasionally wondering if the road to my house, which had been undermined and provided a vista of sinkholes to passersby, was fit to support the weight of mother's minivan. Stories of my great-grandfather and his peers venturing into abandoned mines as young men to scavenge ore from residual pillars did not assuage my concerns. Today, the road seems fine, although the Tar Creek Superfund site about five miles from my childhood home remains the subject of eight-



figure annual expenditures by the EPA. My childhood friends are now rednecks, and I have gone into gold exploration, but the health consequences do not seem to have extended beyond those.

One of the primary school sports rivals of my hometown—Baxter Springs, Kansas—was the neighboring town of Galena, which I learned much later is lead sulfide. If the geological community ever tires of that mineral name, my high school classmates could suggest a variety of colorful alternatives. As far as town names are concerned, I suppose that galena is catchier than sphalerite, although sphalerite might have been less susceptible to mockery.

When I completed my tenure as a generally unmotivated high school student, I started college at the University of Kansas at the behest of my parents, who might have chucked me into a flooded mineshaft otherwise. I did not have a career path in mind but sought something that would not require me to work too hard or become a corporate sellout yet enable me to experience other parts of the world. My resolve was quickly broken on the first two points but I have made some progress on the third. After suffering through an introductory archaeology course that was not reminiscent of the video games that had inspired me, I enrolled in geology 101 at the suggestion of my father, a pragmatic civil engineer who feared that I was on track to remain a negative cash flow for another decade. Thus, I hesitantly dipped my toe into the field of geology—and to the chagrin of my 19-year-old self—have subsequently become enveloped.

The KU Department of Geology is decidedly within the soft-rock camp, with a legacy as a reputable paleontology school and a modern emphasis on petroleum geology. My professors had even less of an interest in the Tri-State mining district than I had had as an emo Junior High student. I cannot say that I was immediately enraptured with geology, but I found the material to be interesting, and I seemed to have a positive enough experience in each course to sign up for the next one in the degree program. I found my geology 101 professor to be attractive, which motivated me to earn an A-, and the combination blew enough wind in my sails to sign up for mineralogy. To my pleasant surprise, mineralogy was a light course, and the professor was a jovial man with an exceptional knack for crafting mineral-inspired jokes that flirted with Title IX violation. After two semesters, the geology habit had set in, and although the courses became more difficult, they remained engaging. (continued on page 5)

Turner, Eli—Faces of GSN (cont. from page 4)

KU puts on a lovely field camp comprised of two weeks at a chic, Frank Lloyd Wright-esque field station in Capitol Reef National Park, Utah and four weeks at a school-owned field station north of Cañon City, Colorado, just a few miles southwest of Cripple Creek (although they don't really care about that). The experience got me thinking that a career in geology might have the right sort of stuff and fanned an early interest in tectonics. I also wrangled a job working as a mineral separation grunt in a zircon U-Pb geochronology laboratory, which lead to a Senior Honor's Thesis project comprising a geochronological study of Miocene volcaniclastic horizons that preserve a mass death assemblage of rhinoceros at a state park in Nebraska. My supervisor, Jon Smith, and I, along with our other collaborators, later published a journal article rooted in the project. The faculty at KU were supportive of my educational experience, generous with their time, and I feel that the school provided a comprehensive introduction to the fundamentals of geology.

When I graduated college in 2017, I nearly stayed at KU to begin a Master's in structural geology, but in the fashion of a young man decided I just couldn't take the Midwest anymore. I accepted a NAGT internship with the USGS Earthquake Science center in Menlo Park, hopped in my '08 Corolla, and moved to the bay area. I got on with a paleoseismological trenching study on a vineyard near St. Helena, and I'm not sure how helpful I was, but I made lots of friends and enjoyed chewing on the wine grapes. The work is now floating around as a USGS open-file report. After the internship ended, I began applying to graduate schools and road tripped the Pacific Coast from Whistler to Guatemala City in that trusty '08 Corolla. Having emptied my coffers in Latin America, and with a few months to go until beginning graduate school, I returned to Kansas to mooch off my parents. At that point, I'm sure my father regretted suggesting that I take up geology. I spent the summer going to construction sites and testing concrete for a geotechnical engineering firm, which made me glad my parents had coerced me into attending college.

In the fall of 2018, I relocated to Las Vegas to begin a Master's degree in tectonics at UNLV. When visiting previously, I had been impacted by the lack of cloudy days and lithic, Martian landscapes that contrasted so sharply with the midcontinent. I did a thermochronology project in the Panamint Range in Death Valley National Park with Michael Wells that focused on the exhumation history of a Mesozoic thrust sheet, which took advantage of my undergraduate experience in geochronology and gratified my interest in tectonics. I think you'll see it come out as a journal article sometime in the next five years!

As I approached the end of my Master's degree in 2020, I had decided that the academic route wasn't for me, but was really no closer to selecting an industry than I had been as an apathetic high school student. Notwithstanding, the

need for income that was emerging over the near-term horizon was a strong motivator. While peddling my scraggly résumé at recruiting events and thumbing through job openings, I got in touch with Bill Howald at Blackrock Silver, who gave me a job sitting an RC rig at the then fledgling Tonopah West project. The first hole of the program—and the first hole I ever logged-returned 29 meters of 5.3 g/t gold and 436 g/t silver, catapulting Blackrock's share price from about 0.44 CAD to 1.50 CAD over a couple of weeks. It was a strange and euphoric (continued on page 6)



Turner, Eli—Faces of GSN (cont. from page 5)

introduction to the dynamics of junior mining companies; like going to the casino for the first time and watching your buddy win a million bucks. I am grateful to Blackrock for giving me a foot in the door to the industry and hope the Tonopah West project continues to advance.

At the beginning of 2021, I defended my Master's thesis and moved to Reno for a job with Orogen Royalties, which had just formed from a merger between Renaissance Gold and Evrim Resources. As a greenhorn riding at the top of the Duning-Kruger Curve, and with a recent experience at the top of the Lassonde Curve, I was excited to work on a team with a track record of significant greenfields discoveries. By virtue of getting hired on immediately post-merger, things progressed differently than I expected, but I have enjoyed working with the great group of people at Orogen and struggle to believe that it has already been three years. I currently live in Sparks with my field assistant, Trixie, and we enjoy ambling around in the Sierra and the high desert during our time off.





NEWS FROM THE FOUNDATION

December, 2023 Bob Felder

The Brian Morris Scholarship trap shoot fundraiser was held in October in Winnemucca. It was a successful and fun event and raised \$14,362 for the scholarship fund. A big thank you to all participants and generous donors and to Chad Peters for once again organizing this event.

The Holiday party and fundraiser is fast approaching and we have been collecting generous donations from members. Please consider making a donation to this very worthy cause, promoting earth science education in Nevada.

Paragon Geochemical has agreed once again to take items for donation at their office.



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 Holiday Meeting & Fundraiser!

Thursday, December 14, 2023

The Martin, 94 W. Railroad St., Winnemucca

Food and Drinks at 6 pm, Talk at 7 pm

In years past, our auction items have ranged from rock slabs to geology books, cases of beer to priceless artwork. If you have something you want to donate to the auction, please email Eli Witte - GSN Winnemucca Secretary: <u>witteeli9@gmail.com</u>

Speaker: Rachel Hampton, Lithium Americas

Title: *"Exploration and Development at the Thacker Pass Lithium Claystone Deposit, Northern NV: Unlocking a Domestic Energy Revolution"*

FOOD & BEER SPONSOR: HECLA MINING COMPANY



Abstract:

The Thacker Pass Project in northern Nevada is the first lithium clay project to break ground in the world and is the first lithium project permitted in the United States in half a century. While lithium can form as economic deposits of several types, including lithium brines and spodumene pegmatites, the lithium deposit at Thacker Pass is hosted in lacustrine clays. The lithium-rich clays of the Thacker Pass deposit are hosted in caldera lake sediments located in the southernmost portion of the ~16.3 Ma McDermitt caldera. The McDermitt caldera hosts the largest known lithium deposit in the world (Benson et al., 2023). The Thacker Pass project, which hosts the highest grade clays in the caldera, is now under construction, and will therefore be a critical piece in the development of a domestic supply chain of lithium in the United States. Lithium exploration was originally undertaken at the Thacker Pass site by Chevron in the late 1970's when, during a prospecting campaign for Uranium, they were alerted to the presence of lithium by the USGS. Chevron subsequently launched a drilling and metallurigical testing campaign to understand the economic potential for this lithium resource. In 2007, Western Lithium USA Corp. took over the project with the intent of k developing the lithium asset, and eventually Lithium Americas took over the project in 2016 and changed the project 🕻 from the Kings Valley Lithium Property to the Thacker Pass project in 2018. Since taking over the project, Lithium Americas carried out several important steps beyond just understanding the geology, including completion of all environmental assessments, securing the correct state and federal permits, signing a first-of-its-kind Community Benefits Agreement with the nearest tribe, and research and development of a novel process to extract the lithium from the clay. Critical to the development of the resource and the new extraction process, Lithium Nevada engaged in rigorous outreach with the global scientific community. The academic collaborations that the Lithium Nevada team was able to build were incredibly valuable for understanding the geologic history of the deposit, including how the lithium entered into the magma and ultimately how it was incorporated into the structure of the illite and smectite clays in the lacustrine system at the McDermitt Caldera. Additionally, these collaborations have improved the mineralogy of the project to help the engineering team design an optimized and economic flowsheet for extracting the lithium from the clays. The long history of engagement with a wide variety of stakeholders – from open houses and student field trips for local residents to collaborations with the vast scientific community - is an excellent example of the process required to bring critical mineral projects online domestically in the 21st century.





Please join us at the GSN Elko Chapter Christmas Party and Silent Auction!. The event will be held at the Western Folk Life Center on Friday December 15th. We ask that everyone bring a silent auction item to donate in exchange for a sponsored dinner, drinks and entertainment! What a deal and it is tax deductible.

Please drop off silent auction items early at Rangefront Mining Services at 1031 Railroad Street, Elko, OR bring them the night of the event.

Once all silent auction items are checked in and put on display, we will break for dinner and the show at 7 pm.

Bidding and drinks @ 6 pm, dinner served @ 7 pm,

Slideshow to begin about 7:20 pm

Presenters: Peter & Jeannette Dilles

<u>Title:</u> "Onça Pintadas of the Pantanal Reserve, Mato Grosso, Brazil"(spotted jaguars in Portuguese)

These big cats are a lot more colorful than our resident mountain lions in northern Nevada, not to mention much larger!

Following the talk we will return to drinking, final bidding on auction items and eventual winners will be decided when bidding closes at 8:15 pm. The event is graciously hosted by dual sponsors, **Boart Longyear and Legarza Exploration**.



AIPG EXPLORATION ROUNDUP Tuesday, December 12, 2023

ATLANTIS HOTEL

(Hotel Reservations 1-800-723-6500 - Code: SOCIAL RATE)

6:00 Open Bar, 7:00 Dinner, 8:00 Program

COMPANIES

Nevada Gold Mines

Headwater Gold Blackrock Silver Kinross Anglogold Ashant I-80 Gold

Orogen Royalties

Meeting Sponsor: Boart-Longyear Join us in thanking Boart-Longyear for sponsoring cocktails and UNR students

RAFFLE ITEMS (\$25 or 5 for \$100) Raffle proceeds fund UNR student chapter functions







DINNER: \$70 (*No Credit Cards: Cash or Check Only*) *Mackay Students: Free* Reservations

<u>Deadline: Wednesday, December 6th, 5:00 p.m</u>

Kel Buchanan (<u>summitcrk@aol.com</u>)

775-786-4515, fax 786-4324

Mining Activity Update OCTOBER 2023, Mike Brady LMBrady@aol.com

NEVADA

Eminent Gold Corp. announced that it acquired an option to earn a 100% interest in the Gilbert South Property from Orogen Royalties Inc. for 350,000 shares now and an additional 200,000 shares upon the commencement of a drill program. *Press Release:* September 27

Americas Gold Exploration Inc. announced that it acquired a data-set from West Vault Mining Inc. regarding its leased Tonopah Divide Mining Co. property in exchange for a 1.0% NSR on the claims and private lands. *Press Release*: October 12

I-80 Gold Corp. announced that recent drill results at the Granite Creek/South Pacific Project include 458.1-463.8 meters @ 26.1 gpt Au (IGS23-01); 459.1-464.7 meters @ 25.6 gpt Au (IGS23-03B) and 465.9-485.6 meters @ 15.5 gpt Au (IGS23-05). (underground resource @ Granite Creek = 562,000 tonnes @ 10.49 gpt Au measured+indicated) *Press Release:* October 11

Ridgeline Minerals Corp. announced that recent drill results at the Selena Project include 93.8-154.5 meters @ 69.8 gpt Ag, 0.6% Pb, 1.3% Zn, 0.4 gpt Au (SE23-47) and 85.3-96.2 meters @ 94.1 gpt Ag, 1.3% Pb, 0.7% Zn, 0.2 gpt Au (SE23-48). *Press Release*: October 12

Fortitude Gold Corp. announced that recent drill results at the Isabella Pearl/Scarlet Project include 30.48-51.82 meters @ 0.55 gpt Au (IPRC-434); 36.58-42.68 meters @ 0.51 gpt Au (IPRC-438); 0-9.14 meters @ 1.05 gpt Au (IPRC-473) and 28.96-45.72 meters @ 0.66 gpt Au (IPRC-487). (reserve @ Isabella Pearl = 2,694,000 tonnes @ 2.22 gpt Au proven+probable) *Press Release:* October 3

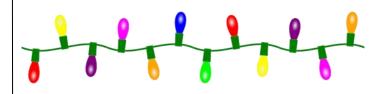
Nevada King Gold Corp. announced that recent drill results at the Atlanta Project include 135.7-231.7 meters @ 2.15 gpt Au (AT23HG-34); 134.1-155.5 meters @ 3.42 gpt Au (AT23HG-35); 143.3-175.3 meters @ 1.10 gpt Au (AT23HG036) and 170.7-285.1 meters @ 1.89 gpt Au (AT23HG-37. (resource = 11,000,000 tonnes @ 1.3 gpt Au measured+indicated) *Press Release:* October 17

Hycroft Mining Holding Corp. announced that recent drill results at the Hycroft Project include 105.16-134.11 meters @ 0.41 gpt Au, 8.8 gpt Ag (H23C-5748); 210.31-245.36 meters @ 0.50 gpt Au, 4.2 gpt Ag (H23C-5750); 357.62-417.15 meters @ 0.36 gpt Au, 75.9 gpt Ag (H23C-5769) and 224.27-328.0 meters @ 0.37 gpt Au, 6.6 gpt Ag (H23C-5770). (reserve = 669,680,000 tonnes @ 0.34 gpt Au, 14 gpt Ag proven+probable) *Press Release:* October 23

Gold Springs Resource Corp. announced that recent drill results at the Gold Springs/Jumbo Project include 137.2-141.7 meters @ 0.44 gpt Au, 6.2 gpt Ag (E22-21); 134.1-140.2 meters @ 1.07 gpt Au, 3.9 gpt Ag (E22-22) and 196.6-204.2 meters @ 0.57 gpt Au, 1.5 gpt Ag (E22-23). (resource @ Gold Springs = 50,555,000 tonnes @ 0.51 gpt Au, 7.7 gpt Ag measured+indicated) *Press Release:* October 23

Lion Copper and Gold Corp. announced that recent drill results at the Yerington/Bear Project include 674.2-956.5 meters @ 031% Cu (B-053A) and 704.4-1,023.8 meters @ 0.26% Cu (B-054). *Press Release:* October 27

Blackrock Silver Corp. announced that based on recent drill results at the Tonopah West Project, resources aggregate 6,119,000 tonnes @ 242.6 gpt Ag, 2.9 gpt Au inferred. (was 2,975,000 tonnes @ 2.5 gpt Au, 208 gpt Ag inferred) *Press Release:* October 10



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

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.

GSN 2024 DIRECTORY ADVERTISING ORDER FORM

E-mail digital advertisements to: gsn@gsnv.org

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2024

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:

<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: <u>https://www.miningamerica.org/annualmeeting/</u> GSN WILL BE IN BOOTH #575 THIS YEAR! Contact Laura at the GSN office if you'd like to volunteer help.

December 5, 2023: Arizona Geological Society. Speaker: Dr. Shelby Rader, Department of Earth and Atmospheric Sciences, University of Indiana. Title: "From Rocks to Stalks: Interpreting the Controls on Biogeochemical Signatures and the Applications of Trace Metals. 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, December 3, 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. https://www.arizonageologicalsoc.org/event-5489174

December 7, 2023: The NPGS (NV Petroleum & Geothermal Society) meeting is Thursday December 7, at 6:30 pm at Tamarack casino, 13101 S. Virginia St. **Please bring a wrapped gift** under \$25. We will raffle the gifts among the attendees. Everyone will go home with at least one gift. Please register now for this event. The price will increase to \$40 on December 4. Click here to register: **Register Now** Please contact Luis Navarro of you have any questions: 832-707-2778, energygeologist@gmail.com

December 9, 2023: DREGS Annual Christmas Pot-Luck, Calvary Episcopal Church, 1320 Arapahoe St., Golden, CO. Social at 6 pm, Dinner at 6:30 pm. Please make dinner reservations with Mary Little - mariape-

quena1@yahoo.com, All reservations must be made by December 4th. \$25 per person at the door.

December 18, 2023: SME Northern Nevada Chapter Christmas Party, Circus Circus Mandalay Room, Reno, NV. We would like to raffle prizes and have silent auctioning of special food, beverage and mining related items, and members donations will be greatly appreciated. Should you desire to donate or contribute in any manner, please let us know by sending an email to us at: <u>NNevSME@gmail.com</u>. Also email us about the details of the party.

January 29 - February 1, 2024: NWRA 2024 Annual Conference WEEK. Held at the Tuscany Suites & Casino, Las Vegas, Nevada. Go to <u>https://www.nvwra.org/2024-annual-conference-week</u> for conference information and registration. For questions or more information call Tina Triplett at 775-473-5473 or e-mail NWRA at <u>admin@nvwra.org</u>.

January 29-30, 2024: NWRA 2024 "Symposium. Held at the Tuscany Suites & Casino, Las Vegas, Nevada. Register by January 1, 2024, for early rates. Go to <u>https://www.nvwra.org/2023-mine-water-symposium</u> for symposium information and registration. For questions or more information call Tina Triplett at 775-473-5473 or e-mail NWRA at <u>admin@nvwra.org</u>.

The Nevada Geology Calendar 2024 is available to order now!

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

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BABY ANNOUNCEMENTS!

Angela Rose Bickel

September 22, 2023

Congratulations to Jeff Bickel and his wife Ana on the birth of the beautiful baby daughter Angela Rose. She was born on September 22, 2023. She joins her very proud big brother Joey in the Bickel Family!



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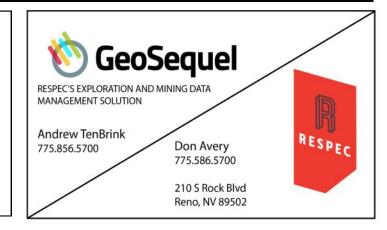
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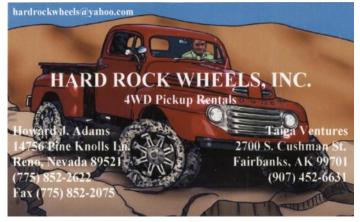
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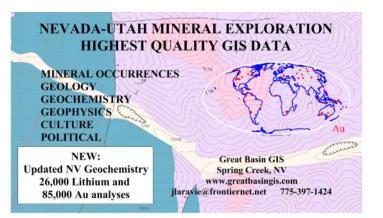


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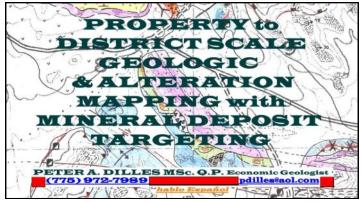
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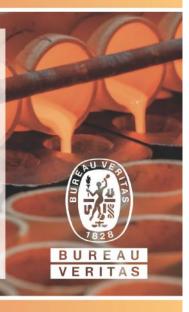
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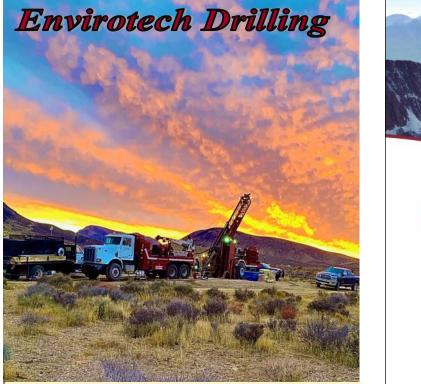
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A big THANKS to Don Hudson for submitting the GSN backpack photos in Ireland last month! GSN TRAVELLING BACKPACK PICTURES (Submit your photo to gsn@gsnv.org!)

This month's travelling backpack photos were submitted by Opal Adams. Thank you!



GSN backpack at the Petra Jordan Monastery2023



Opal Adams at Egyptian Pyramid—2023