

GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Reno, NV 89512
(775) 323-3500 - Hours Monday -- Friday, 9 a.m. to 4 p.m.
Website: www.gsnv.org • E-mail: gsn@gsnv.org



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April 10, 2022

SUNDAY!!

9:30 AM

FIELD OUTING

GSN SOUTHERN NEVADA CHAPTER MEETING

The Southern Nevada Chapter will have a field outing in lieu of the regular meeting. Josh Bonde and Becky Hall, NV Science Center, will lead the trip. Title, "**Early Mesozoic Paleontology, Sedimentology, and Structure of the North Muddy Mountains**".

For more information please contact So. NV President, Joshua Bonde at: joshua.bonde@nvscicenter.org. Details on pg. 7.

April 13, 2022

WEDNESDAY

IN PERSON

GSN WINNEMUCCA CHAPTER MEETING

The Winnemucca Chapter will hold its meeting **IN PERSON** at the Martin Hotel, 94 W. Railroad St. **Speaker: To Be Announced. Title: To Be Announced. Food & Drink Sponsor: To Be Announced.** Please contact Chad Peters, President, for more info: cpeters@ridgeline minerals.com. Details & slate of officers on pg. 7.

April 15, 2022

FRIDAY

IN-PERSON &

ZOOM

GSN REGULAR MEMBERSHIP MEETING

The GSN regular meeting will be held at the Reno Aces 250 Lounge, 250 Evans, Reno. **Speaker: Cheri Leeden, CEO & Founder Gold Bull Resources. Title: "Is Hog Ranch a Tier 1 Gold Camp?".** **Drinks Sponsor: GEOTEMPS/GEOPROS.** Please register for dinner online and send RSVPs to Laura Ruud, gsn@gsnv.org. **ONLINE RESERVATIONS CAN BE MADE on the GSN WEBSITE by clicking this link: [DINNER RESERVATIONS](#).** Dinner cost is \$35 per person. Details on page 3.

NOTE! ALL ATTENDEES must RSVP to get a free parking pass for the garage by April 8th! There is an Aces game that night.

April 21, 2022

THURSDAY

IN PERSON

GSN ELKO CHAPTER MEETING

The GSN Elko Chapter will hold their in-person meeting at the Western Folklife Center, 501 Railroad St. **Speaker: Bill Howald, Exec. Chair & Director, Blackrock Silver Corp. Title: "AWAKENING THE SILVER QUEEN". Food & Drink Sponsor: Jentech Drilling Supply.** Please contact President Justin Milliard: justin.b.milliard@gmail.com for more information. Details on pp 8-9.

**SYMPOSIUM
2022 ONLINE
REG. CLOSES
APRIL 22ND!**

**REGISTRATION FOR THE GSN SYMPOSIUM 2022 IS
OPEN TO EVERYONE ONLINE UNTIL APRIL 22ND!
Please visit the website: www.gsnsymposium.org
ONSITE REGISTRATION STARTS MAY 1ST AND WILL
COST YOU \$100 MORE!**

GSN APRIL Meeting Sponsor!



FROM THE PRESIDENT
Patsy Moran, GSN President 2021—2022
APRIL 2022

Spring is in the air! This is the beginning of my favorite time of year since it is like coming out of hibernation. Hopefully, we have warm weather for the April membership meeting in Reno so we can enjoy the outdoor venue too. Cherie Leeden will answer the question, Is Hog Ranch a Tier 1 Gold Camp? April will be the last of the regular Chapter membership meetings, before Symposium, and a break for the “field season.” We have a great group of volunteers that have been nominated to take the GSN reins after Symposium, with some familiar and a few new faces. Please make sure to cast your vote.



Pictures from the GSN Spring field trip 2021
to the Yerington Mining District.

(by L. Ruud)



***The G.S.N. wishes to
thank CGS Mule for
sponsoring GSN's
Meeting on March
18th in Reno!***



GSN MEMBERSHIP MEETING—APRIL 15, 2022

**Guest Speaker: Cheri Leeden, CEO & Founder
Gold Bull Resources**

Title: Is Hog Ranch a Tier 1 Gold Camp?

Date: FRIDAY, April 15, 2022

Time: Drinks @ 6 pm, Dinner @ 6:30 pm, Talk @ 7:30 pm

Sponsor: GEOTEMPS/GEOPROS INC.

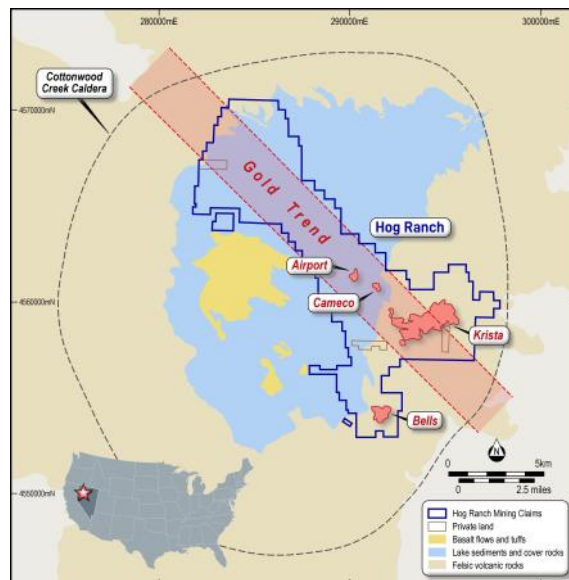
**Where: Reno Aces Ball Park, 250 Evans St.
Upstairs at the 250 Lounge/Good Hops Restaurant**

IMPORTANT! There is an Aces Game the same night as our meeting. ALL who attend (including non-dinner guests) must send me their name ASAP to receive a parking permit for the garage on 2nd St. The regular parking lot is not free that evening!

ONLINE RESERVATIONS CAN BE MADE on the GSN WEBSITE by clicking this link: [DINNER RESERVATIONS](#).
Abstract:

Hog Ranch, located in northern Washoe County, was a former small scale gold producer until gold fell to circa \$300 per ounce in the early 90's. Hog Ranch is owned by ASX listed Rex Minerals Limited (Rex) see website: [Rex Minerals — Hog Ranch](#)

New large regional datasets have shown that Hog Ranch could be one of the few remaining gold projects in Nevada to host a Tier one gold camp. (cont. on page 4)



Leeden Abstract (cont. from page 3)

Over the past few years, Rex has defined a Mineral Resource of 2.26 million ounces of gold. The bulk of this Mineral Resource is shallow (less than 150m below surface) and amenable to low strip ratio open pit-mining and heap-leach processing. The bulk of the Mineral Resource remains open in multiple directions with further high-grade vein hosted gold and potential large scale high-sulfidation targets yet to be tested throughout Hog Ranch.

Since Rex acquired Hog Ranch in 2019, there have been a number of large regional datasets including airborne magnetic and radiometric data in addition to airborne hyperspectral data and some local 3D IP test work.

These new datasets when combined with a fresh look on the ground by some global epithermal gold experts have shed some new light on the potential scale of the hydrothermal system at Hog Ranch. This new information indicates that the historical mining and current Mineral Resource (of over 2.5Mozs Total) appears to be the “tip of the iceberg” of a much larger hydrothermal system.

In late 2021, Rex made some additional discoveries at Hog Ranch, on the back of targeting from 3D IP geophysical data. Further trials of soil sampling data have also shown that the combination of the new large magnetic, hyperspectral datasets with soil sampling data could rapidly uncover the potential that is interpreted to exist at Hog Ranch.

Rex is currently undertaking a large regional soils sampling survey to cover the entire Hog Ranch Property area which covers over 79sqkms, which will add further valuable information for focussing the next round of drilling at Hog Ranch in 2022.

Speaker Bio: Cherie Leeden is a Resources Executive with two decades of experience; the first ten years spent as a boots on ground geologist and the past decade corporately focused. She has led businesses in senior positions at publicly traded companies as well as developed and built several successful resource focused start-ups.

Originally from Western Australia, Cherie relocated from Mozambique to Nevada in 2014 and calls Incline Village home. Cherie is Founder of private project generator & advisory company: NV Resources, CEO and Founder: Gold Bull Resources Corp (TSX.V:GBRC) and Director of Hog Ranch Minerals Inc (ASX:RXM).

Cherie is proud to be part of the global mining industry and has a passion for adding value via exploration. She promotes the industry and its vital role in our society at every chance she gets.



“FACES OF GSN”

GREG DERING

Truckee, California

Fifteen years ago to the month I woke up on the ground at the back of a parking lot a ways north of Winnemucca. Anyone reading this likely knows the place; it's a Sinclair now but was a Chevron then, at the turnoff from US 95 to Paradise Valley. Like this year, it had been a mild spring and it was easy enough to get going.

Twenty miles down the road, I was interviewed for my first Nevada geology job. It happened at the Griddle, second booth on the left. Over pancakes and a newspaper, Dave Arbonies politely perused my resume: title of undergraduate thesis, GPA, whatever else an undergraduate geology student with zero professional experience could cobble together. Dave paused halfway down the page on Work Experience; I had a couple summers and one winter of commercial fishing experience in Alaska. Long days working outside around heavy equipment became more important than any geology class. A couple weeks later I was working for Dave at the Pinson Project and never looked back. The culture of Nevada exploration turned out to be an alluring mix of the technical and profane that was a ton of fun.



Compiling air photo geology, Elko County



Field mapping, northern Elko County

Since that first spring in Nevada, a career in geology has taken me from the Aleutians to Australia to the Alps and back to the Basin and Range. Working underground at Pinson (now Granite Creek) and then at Cortez Hills sparked an interest in structural geology, igneous rocks, and hydrothermal processes. Along the way, Mark Coolbaugh gave an excellent GSN talk in the back room of the Martin Hotel in Winnemucca that linked gold deposits to geothermal systems in Nevada. Mark pointed me to Professor Jim Faulds at the Nevada Bureau of Mines and Geology, then expanding his mapping-oriented geothermal (cont. on page 6)

research group. He took me on as a graduate student studying the links between extensional tectonics in and geothermal activity in the Basin and Range. Under Dr. Faulds I learned to write and to map. After a taste of the geothermal world, I was ready to turn back to mineral exploration. After some odd jobs in Nevada and Alaska, an opportunity arose to do a PhD at the University of Western Australia in Perth. It was 2014 and with exploration expenditures in Nevada deflating rapidly, moving to Australia was an opportunity to see new (older) rocks and deposit types, where exploration under cover has been the norm for decades.

Since returning to Reno, I've taken on a new set of challenges in familiar terrain with the junior explorer Headwater Gold. Over a few short years Headwater has generated a substantial portfolio of epithermal gold projects in Nevada, Oregon, and Idaho. The growth of the company is a daily reminder how exciting and satisfying mineral exploration in the western US can be. Fifteen years have flown by, but writing this, it still feels like things have just begun.



Mapping in an active fumarole field (less sketchy than it looks!), eastern Aleutians, Alaska



Gold exploration,
Delta Junction, Alaska



GSN WINNEMUCCA CHAPTER UPDATE



The GSN Winnemucca Chapter will be hosting an IN-PERSON meeting.

Wednesday, April 13th — Drinks at 5:30 pm and talk at 6:30 pm

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

Speaker and Topic: To Be Announced

SLATE OF OFFICERS FOR 2022-2023: President: Nancy Wolverson

Vice-President: Pat Donovan

Secretary: Sandra Powers

Treasurer: Andrew Smith

Membership: JoAnn Newbury

Please contact Chad Peters, Winnemucca President, for more info.

Chad Peters, P.Geo.

President & CEO

Ridgeline Minerals

GSN Winnemucca Chapter President

cpeters@ridgelineminerals.com



GSN Southern Nevada Chapter's April Outing!



Sunday April 10, 2022, Meet up 9:30am

Moapa Paiute Truck Stop, Valley of Fire Highway and I-15, Moapa, NV 89025

As the weather in Southern Nevada has hit optimal field weather, the Nevada Science Center is inviting those interested in a field outing in lieu of a monthly meeting! We hope to see some familiar faces and encourage new!

Early Mesozoic Paleontology, Sedimentology, and Structure of the North Muddy Mountains

Trip Leaders: Joshua Bonde Ph.D., Director of Research, and Becky Hall, Executive Director, Nevada Science Center

The Nevada Science Center has active research areas across the State, with a geologically and paleontologically significant field area in the North Muddy Mountains of Clark County. This area has undergone extensive Cenozoic deformation but exposed within this area are Lower Mesozoic units of the Moenkopi and Chinle Formations. These units represent a period when southern Nevada sat along the periphery of North America. During deposition of the early Triassic Moenkopi Fm, the region was a part of a vast tidal flat complex, which includes parts of Utah, Arizona, and New Mexico. During the Chinle Fm deposition sedimentary systems had transitioned into fluvial-estuarine deposits. Nevada Science Center staff will guide participants through the stratigraphy, discuss the fossil remains in the section and their significance, and the subsequent structural modification to the area.

Please **RSVP** to allow for communication about meet up and other important information.

<https://forms.gle/RsvTjhARqP2iXBv4A>

Suggested donation to be collected at meetup: \$10 members, \$5 students, \$20 non-members

Included: Guides, snacks, bottled water

To Bring: Hiking footwear, water, sunscreen, hat, backpack, lunch, or anything you need for hiking. Meet up at the Moapa Paiute Truck stop. From there we will be caravanning to location. Carpooling from truck stop is recommended to reduce the number of cars.

GSN Elko Chapter—April 2022 Update

Western Folk Life Center

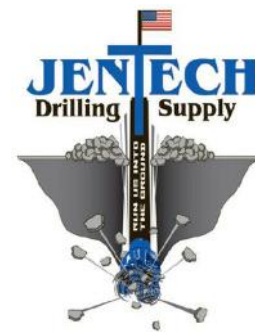
Thursday, April 21, 2022

Food and drinks @ 6 pm and talk to begin at 7 pm.

Presenter: William C. Howald, Executive Chairman & Director of Blackrock Silver Corporation, Vancouver, British Columbia, Canada

Title: “AWAKENING THE SILVER QUEEN”

MEETING SPONSOR:



The Elko GSN Chapter is excited to have William C. Howald of Blackrock Silver Corporation giving the final presentation this spring season on the Tonopah West project. Jentech generously sponsoring the meeting. Please note, that due to the GSN Symposium occurring in May our chapter will not hold a meeting. Lastly, please feel free to vote for your 2022-2023 Officers at the following link.

<https://www.surveymonkey.com/r/XNQ7XQ8>

Abstract:

It's often stated that the Comstock put Nevada on the map, and Tonopah kept it there. The Tonopah district is located at the south end of the San Antonio Mountains in west central Nevada within the Walker Lake trend. Known as the Queen of the Silver Camps, Tonopah produced over 174 million ounces of silver and 1.8 million ounces of gold from approximately 7.5-million tonnes of high-grade silver-gold epithermal quartz veins and is the second largest silver district in Nevada.

The history of Tonopah is famed and fabled in the characters that descended on the mining camp. Tonopah enthralled Jim Butler, Tasker Oddie, Wyatt Erp, George Wingfield, Charles Schwab, and Howard Hughes and many others over its 120-year history.

Discovered by Jim Butler's lost mule in May 1900, the find kicked off four recognized mining periods. From 1900 to 1902, mining was almost exclusively carried out by individual leasers. From about 1903 to 1910, the district attracted large publicly traded mining companies that purchased existing claims and built infrastructure. By 1910, the mining groups began a phase of merger and expanded production. The Tonopah Extension Mining Company (TEMC) amalgamated more than five mining entities on the west side of the district to become the third largest producer. The period of increased production was followed by an era (1930 to 1950) of decline caused by water in the mines, low silver prices and the Great Depression.

The district is host to a classic bonanza-grade low- to intermediate-sulfidation epithermal silver and gold system. Wall-rock alteration in the epithermal system grades from fresh rock to propylitic alteration to intermediate argillic alteration to potassic alteration (adularia) at vein margins to quartz veins with sulfides. Farley recognized (cont. on page 9)

Howald Abstract (cont. from pg. 8) three stages of vein filling with an early and late barren stage. The ore stage formation temperatures range from 220 degrees Celsius to 280 degrees Celsius. The principal silver-bearing minerals are argentite (acanthite), polybasite, and pyrargyrite. Gold occurs predominately as electrum. Silver haloids were important ore minerals in the shallow oxide zone. The age of the bonanza-grade mineralization is estimated to be between 17 m.y. and 20.5 m.y. based on stratigraphic limits. A younger gold system is also present.

In the Western half, the ore hosts are the Tonopah Formation, Mizpah Andesite, Extension Breccia, and the West End Rhyolite. Exposures of the Tonopah Formation and Mizpah Andesite outcrop. The West End Rhyolite and Extension Breccia are exposed only in underground workings on the west side of the district.

The veins are east-west oriented and dips range between 15 to 90 degrees. In the western portion, the veins occur at contacts with the West End Rhyolite and the Tonopah Formation, Extension Breccia and the Mizpah Andesite. Occasionally veins are found internal to these lithologies. The Tonopah Formation is domed along an east-west axis. Along the dome, veins roll over from north dipping to flat to shallow south dips. Several lawsuits were fought over Apex Rights.

Modern exploration efforts commenced in 1979. Between 1979 and 2019, several exploration companies conducted drilling in the western half of the district including Houston Oil and Minerals, Eastfield Resources Ltd. and West Kirkland worked in the district.

In February 2020, Blackrock Silver Corporation completed a transaction with Ely Gold Royalties to acquire 100% of the Western half of the Tonopah district for US\$3 million dollars over four years. Ely Gold retains a 3% NSR royalty. Blackrock acquired the lands of the former TEMC and a major portion of the West End Consolidated Mining Company. The lands acquired consists of 97 patented lode mining claims and 19 unpatented lode mining claims straddling the Esmeralda and Nye County boundary.

Blackrock initially outlined a 7,000-meter drilling program in four target areas. In July, Blackrock announced the results of its first drillhole in the Victor area which returned three meters grading 2,198 g/t silver equivalent (silver:gold ratio 100:1) using a 300 g/t AgEq cut-off grade, and 965 g/t AgEq over 29 meters. Drilling in two other targets returned exciting results including 1,577 g/t AgEq over 4.6 meters including 3.0 meters grading 2,215 g/t AgEq. The drillhole also intersected a new vein yielding 1.5 meters of 1,670 g/t AgEq.

Because of the encouraging results on Blackrock's maiden drill campaign, the drilling continues and has expanded to over 110,000 meters and focussed within the Victor and DPB target areas. Drilling is focused on delineating the historic and new underground targets from the surface. Currently the project is advancing with one core and one RC drill. A maiden resource anticipated in April 2022.

INFORMATION ABOUT OUR SPEAKER AND SPONSOR COMPANIES:

Blackrock Silver Corp.

Blackrock's flagship Tonopah West project consolidates the western half of the famed Tonopah Silver District within the Walker Lane trend of Nevada. Known as the Queen of the Silver Camps, the Tonopah Silver District produced over 174 million ounces of silver and 1.8 million ounces of gold from approximately 7.5 million tonnes of high-grade silver-gold making it one of the most significant silver-gold districts in North America. As the first group to target the historic workings on the property since production shut down nearly 100 years ago, Blackrock has since completed in excess of 110,000 metres of exploration drilling since 2020, including a 50,000 metre infill program. Blackrock is quickly and methodically moving to advance the project, with a maiden resource estimate expected during Q1, 2022, and has a 9,000 metre blue-sky exploration drill program underway testing new district-scale targets.



<https://blackrocksilver.com/>

Jentech Drilling Supply Inc.

Jentech Drilling Supply Inc. is a service oriented supply company serving the Groundwater, Mining, and Mineral Exploration industries. We specialize in helping our customers implement drill systems from the "Top Head to Bit".

- Full line of drilling products from top manufacturers
- Working with latest technology and productivity
- Serving our customers since 2002

"Run us into the Ground"

<https://www.jentechdrillingsupply.com/>



NEWS FROM THE FOUNDATION

By Cami Prenn, GSN Foundation Chair

Spring has sprung! And that means field season is here, although these days field season seems to go year-round. But it does mean that Field Camp will soon happen for the UNR geology students. The Foundation has scholarships available for the UNR Field Camp; the application is on the website and the deadline is April 8.

Spring 2022 also means that Symposium is almost here – finally! The Foundation is hosting the Landshark Lounge, a fundraising party on Wednesday night of the Symposium, May 4th. Tickets for the party are \$25 each and can be purchased on the Symposium website. If you're bringing a guest who is not registered you do NOT need to purchase a guest pass, just a ticket for the party. We have some generous donors who are sponsoring the party; **Baroid / Jentech** and **Blackrock Silver**. We hope you'll come and we thank our sponsors for their support of the Lounge!

The fundraising part of the event is a raffle for two seats on the Grand Canyon Raft Trip led by Dr. Lew Kleinhans Aug. 28 – Sept 6, 2023!! Our sponsor of this prize is **Envirotech Drilling**! The trip will be 9 days on the river with plenty of time for hiking. Hatch River Expeditions is the commercial river company that will guide the lucky guests through the rapids, prepare all the meals, and supply all the camping equipment. Raffle tickets are \$20 each, also available on the website. The winning ticket will be drawn at the Landshark Lounge; winner doesn't have to be present but must be registered for the Symposium.

This is the trip of a lifetime so please buy lots of tickets to increase your chance of winning!

Thank You to Our Generous Sponsors!



Envirotech Drilling LLC

Mining Activity Update

Mike Brady, FEBRUARY 2022

LMBrady@aol.com

NEVADA

Barrick Gold Corp. announced that it paid EMX Royalty Corp. \$25,000,000 for back royalties as stipulated in a court settlement regarding EMX's subsidiary Bullion Monarch Mining Inc. *Press Release*: February 18

Centerra Gold Inc. announced that it acquired the Goldfield Properties of Waterton Nevada Splitter Inc. for \$175,000,000 cash. (resource @ Gemfield = 38,663,000 tonnes @ 1.1 gpt Au measured+indicated) *Press Release*: February 22

Kinross Gold Corp. announced that recent drill results at the Round Mountain Project include 490.4-551.4 meters @ 3.38 gpt Au (D-1139); 310.9-389.4 meters @ 6.90 gpt Au (D-1154); 296.3-325.5 meters @ 12.12 gpt Au (D-1156) and 557.2-560.2 meters @ 4.18 gpt Au (D-1158). (reserve = 134,778,000 tonnes @ 0.7 gpt Au proven+probable) *Press Release*: February 16

Kinross Gold Corp. announced that recent drill results at the Bald Mountain Project include 222.5-335.4 meters @ 1.58 gpt Au (TD21-04); 164.6-222.5 meters @ 0.71 gpt Au (WP21-02); 143.3-190.5 meters @ 1.20 gpt Au (WP21-09) and 50.3-112.8 meters @ 0.41 gpt Au (ZW21-07). (reserve = 40,980,000 tonnes @ 0.6 gpt Au proven+probable) *Press Release*: February 16

ATAC Resources Ltd. announced that it terminated its interest in the East Goldfield Project of Silver Range Resources Ltd. due to discouraging exploration results. *Press Release*: February 23

AngloGold Ashanti Ltd. announced that based on recent drill results at the Silicon Project, resources aggregate 120,440,000 tonnes @ 0.87 gpt Au inferred. (no previous estimate) *Press Release*: February 23

Timberline Resources Corp. announced that recent drill results at the Eureka Project include 219.5-242.4 meters @ 1.11 gpt Au (BHSE198); 161.5-166.6 meters @ 2.85 gpt Au (BHSE204); 229.2-239.9 meters @ 2.96 gpt Au (BHSE211C) and 140.8-163.7 meters @ 6.11 gpt Au (BHSE220C). (resource = 26,254,000 tonnes @ 0.62 gpt Au measured+indicated) *Press Release*: February 24

Emgold Mining Corp. announced that recent drill results at the New York Canyon Project include 47.7-89.93 meters @ 0.20% Cu, 0.01 gpt Au (NYCN05) and 136.55-147.24 meters @ 0.31% Cu, 0.02 gpt Au (NYCN08). *Press Release*: January 26

P2 Gold Inc. announced that based on recent drill

results at the Gabbs Project, the Sullivan Deposit aggregates 43,400,000 tonnes @ 0.47 gpt Au, 0.28% Cu indicated and 16,300,000 tonnes @ 0.43 gpt Au, 0.26% Cu inferred. (was 37,600,000 tonnes @ 0.58 gpt Au, 0.28% Cu inferred) *Press Release*: February 10

Paramount Gold Nevada Corp. announced that recent drill results at the Sleeper Project include 222.5-231.6 meters @ 0.41 gpt Au (PCR21-01); 298.7-303.3 meters @ 0.38 gpt Au (PCR21-04); 175.3-201.2 meters @ 0.16 gpt Au (PCR21-05) and 155.4-160.0 meters @ 0.58 gpt Au (PCR21-06). (resource = 294,400,000 tonnes @ 0.36 gpt Au measured+indicated) *Press Release*: February 23

I-80 Gold Corp. announced that recent drill results at the Granite Creek/South Pacific Project include 352.0-355.9 meters @ 17.2 gpt Au (IGS21-07); 356.2-360.9 meters @ 8.0 gpt Au (IGS21-08); 424.6-428.8 meters @ 17.2 gpt Au (IGS21-10) and 436.5-442.0 meters @ 25.5 gpt Au (IGS21-11). (resource @ Granite Creek = 20,460,000 tonnes @ 1.95 gpt Au measured+indicated) *Press Release*: February 2

Getchell Gold Corp. announced that recent drill results at the Fondaway Canyon Project include 75.6-89.7 meters @ 2.1 gpt Au (FCG21-16). (resource = 2,050,000 tonnes @ 6.18 gpt Au indicated) *Press Release*: February 15

Gold Springs Resources Corp. announced that recent drill results at the Gold Springs Project include 86.9-102.1 meters @ 0.70 gpt Au, 11.1 gpt Ag (CR21-016); 131.1-147.8 meters @ 1.82 gpt Au, 19.8 gpt Ag (CR21-017); 146.3-167.6 meters @ 0.48 gpt Au, 5.4 gpt Ag (CR21-018) and 205.7-214.9 meters @ 2.0 gpt Au, 1.8 gpt Ag (CR21-019). (resource = 754,500 tonnes @ 2.05 gpt Au inferred) *Press Release*: February 16

Blackrock Silver Corp. announced that recent drill results at the Tonopah West Project include 565.1-567.1 meters @ 3.64 gpt Au, 377.3 gpt Ag (TXC21-045); 428.9-430.1 meters @ 1.71 gpt Au, 303 gpt Ag (TXC21-047); 553.2-554.7 meters @ 2.0 gpt Au, 298 gpt Ag (TW21-109) and 538-541 meters @ 1.16 gpt Au, 176.5 gpt Ag (TW21-116). *Press Release*: February 17

Lion Copper and Gold Corp. announced that based on recent studies at the MacArthur Project, resources aggregate 273,000,000 tonnes @ 0.17% Cu measured+indicated and 140,700,000 tonnes @ 0.15% Cu inferred. (was 144,630,000 tonnes @ 0.21% Cu measured+indicated and 221,280,000 tonnes @ 0.20% Cu inferred) *Press Release*: January 13

PLATINUM LEVEL SPONSORS - >\$25,000



GOLD LEVEL SPONSORS - >\$20,000



FORTITUDE GOLD CORP.



SILVER LEVEL SPONSORS - >\$10,000



BRONZE LEVEL SPONSORS - >\$5,000



GSN 2022 SYMPOSIUM APPRECIATES OUR SPONSORS!

COPPER LEVEL SPONSORS - >\$1,000



ZINC LEVEL SPONSORS - \$100 - \$999



2022 SYMPOSIUM CO-HOSTS





Geological Society of Nevada SYMPOSIUM 2022

May 2nd – 5th 2022

*with pre- and post-meeting
Field Trips and Short Courses*
IN-PERSON MEETING

Nugget Casino Resort, Reno-Sparks, Nevada

*****PROGRAM*****

4 days of TECHNICAL SESSIONS

FIELD TRIPS

SHORT COURSES

TRADE SHOW

CORE SHACK

*****REGISTRATION OPEN*****

GENERAL INFORMATION: www.gsnsymposium.org/

REGISTER: www.gsnsymposium.org/register

*****KEYNOTE SPEAKERS*****

Richard J Goldfarb, *“Carlin-Like and Carlin-Unlike Deposits: Perspective from the Orogenic Gold World”*

Quinton T. Hennigh, Crescat Capital

Joe Mazumdar, *“Ticking Through the Investment Clock”*

Elizabeth L. Miller, *“Mesozoic and Cenozoic Tectonic Evolution of the Great Basin”*

John L. Muntean, *“Carlin-Type Deposits: Models and Exploration Implications”*

John Prochnau, *“Geology, The Art of Exploration and Discovery”*

Eric Sedorff, *“Geometry and Evolution of Normal Faults Formed During Lithospheric Extension of Continents”*

Maira T. Smith, *“Exploration in the 21st Century: Navigating the New Paradigm”*

Chuck H. Thorman, *“Basin & Range Geology: Evolution of Thinking from 1920 to 2020”*

ADDITIONAL PROMINENT SPEAKERS

Stuart Simmons, *“Origins of Calcite and Quartz Lattice Textures in Epithermal Deposits”*

Stuart Simmons, *“Distal and Peripheral Exploration Guides to Low-Intermediate-Epithermal Sulfidation Vein Deposits Based on Studies of Modern Hydrothermal Systems”*

Jeffrey Hedenquist, *“Regional Setting and Exploration Potential, DeLamar—Silver City District, Idaho: Paleosurface Preservation and Active Analogues”*

Peter Megaw, *“Multiscale Mineral Textures as Exploration Vectors in Carbonate Replacement Deposits”*

Doug Kirwin, *“Unidirectional Solidification Textures: A Field Review”*

Doug Kirwin, *“The Permian Carlin-Type Gold Deposits in Southwest Kyrgyz Republic”*

****QUESTIONS:**

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Structure of Ore Deposits in the Basin and Range Region

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Best Practices/Innovations: Geological Modeling, Mineral Resource Estimation

Exploration Geophysics Case Histories

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Eocene Tectonics, Magmatism and Metallogeny

Strategic & Critical Minerals

Discovery History

Carlin on the Edge: Off-Trend Deposits and Concepts

USGS Earth/MRI Roundtable

High Sulfidation Precious Metal Deposits

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Geochemical Crossroads: Time to Look Deeper and Under Cover

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OTHER UPCOMING EVENTS

April 7, 2022: **NPGS** - the Nevada Petroleum & Geothermal Society will meet at the Tamarac Casino, Reno, NV. Our speaker this month will be: Kellen Gunderson, P.G., Ph.D., Senior Geoscientist at Zanskar Geothermal & Minerals, Inc. **Title: Quantifying subsurface geologic uncertainty** . [REGISTER HERE FOR APRIL 7 MEETING](#)

April 11, 2022: **SME Northern Nevada Chapter Meeting**, Circus Circus Mandalay Room, Reno, NV. **Speaker: Mike Visser, Administrator, Nevada Department of Minerals. Topic: An update on agency activities and what to expect this upcoming season.** [RSVP](#) here. **Dinners and all the payments can now be [paid for online](#) ahead of time.** For more information contact: NNEvSME@gmail.com

April 14, 2022: **AEG Great Basin Chapter STUDENT NIGHT!** The AEG meeting will be held at Courtyard by Marriott — Reno Downtown/Riverfront, 1 Ballpark Ln, Reno, Nevada, 89501 **Students will speak and present posters on a variety of Topics.** <https://nbmg.blog/2022/04/01/aeg-great-basin-chapter-student-night/> Contact Merrily Graham for more information: mkgraham75@gmail.com

April 16, 2022: **Arizona Geological Society** Members and their guests are invited to join the field trip as we visit Stevens Mountain and the north Coyote Mountains. The Arizona Geological Society website address is www.arizonageologicalsoc.org. **Field Trip Costs** - \$45.00 for members, \$50.00 for non-members and \$15.00 for students. These fees will cover the cost of a printed copy of the Field Trip Guidebook, lunch, refreshments and tour materials. **Registration Deadline for this event is 6 PM on April 6, 2022.** Link for more information and online registration: [Spring Field Trip - Mountains, Mines and Structural Settings of the North and Central Altar Valley, Coyote Mountains to Sierrita Mountains, Pima County, Arizona](#)

APRIL 28—MAY 8, 2022: **GEOLOGICAL SOCIETY OF NEVADA'S SYMPOSIUM 2022!** **Nugget Resort, Sparks/Reno Nevada.** Technical Sessions, Pre and Post Meeting Field Trips & Short Courses, Exhibits, Luncheons, Parties! Visit the Website for more information: WWW.GSNSYMPIUM.ORG Online registration ends April 22nd. Onsite opens May 1st and a full tech sessions pass will be \$100 more. Register now! <https://www.gsnsymposium.org/register/>

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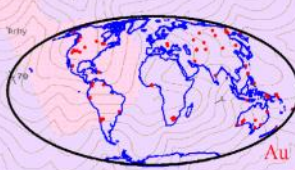
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