GEOLOGICAL SOCIETY OF NEVADA
NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Room 107, 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

JANUARY 2021 ISSUE, Vol. 37, No. 1

Published monthly except June and July

No meeting in January

GSN WINNEMUCCA CHAPTER MEETING

No Winnemucca Chapter Meeting this month. For questions, please contact President Chad Peters at: cpeters@ridgelineminerals.com

No meeting in January

GSN SO. NEVADA CHAPTER MEETING

No Southern Nevada Chapter Meeting this month. For questions, please contact President Josh Bonde at: joshua.bonde@nvscicenter.org

JAN. 15, 2021
FRIDAY
Via Zoom

GSN REGULAR MEMBERSHIP ZOOM MEETING

The GSN's January meeting will be held via Zoom on Friday, Jan. 15th beginning at 6:15 pm for chatting. Talk begins at 6:30 p.m. **Speaker: Carson Richardson, Arizona Geological Survey. Title: "Deformation, magmatism, and ore deposits of the northern Shoshone Range, Nevada: Considerations for the exploration of Carlin-type deposits in the footwalls of folded thrust faults"** . Please contact Laura Ruud at the GSN office if you have any questions: gsn@gsnv.org. See page 3 for abstract and Zoom meeting log-in information!

JAN 21, 2021
THURSDAY
Via Zoom

GSN ELKO CHAPTER ZOOM MEETING

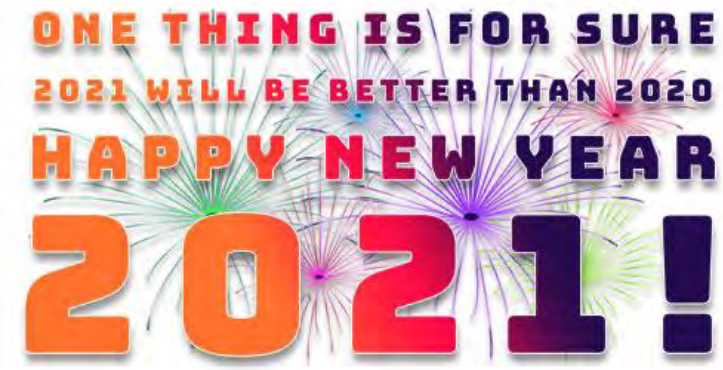
The GSN Elko Chapter will be hosting their meeting via Zoom on Thur., January 21st at 7 p.m. **Speaker: Luke Schranz, CREG Program at UNR, will be giving a talk titled, "Geologic Setting, Host Rocks, and Contrasting Mineralization; New Insights from Detailed Underground Mapping of the Fire Creek Mine**". Please contact Elko President Justin Milliard: justin.b.milliard@gmail.com for more information. Abstract and Zoom meeting login credentials can be found on page 7.

JAN. 28, 2021
THURSDAY
Via Zoom

GSN SYMPOSIUM 2021 ZOOM LECTURE SERIES

The GSN 2021 Symposium lecture will be held on Thur., Jan. 28th via Zoom beginning at 7:00 p.m. Pacific. **Speaker: Zach Grimac, Gold Standard Ventures. Title: "The Use of Geophysics in the Exploration for Carlin-Type Deposits in the Railroad District, Carlin Trend, Nevada".** See Abstract and Zoom Login information on page 8. Contact Technical Chairs, Mike Ressel or Molly Hunsaker for more information.

mikeressel@sbcglobal.net or mollymariehunsaker@gmail.com



FROM THE PRESIDENT
Mary Stollenwerk, GSN President 2020-2021

The Monthly Membership Meetings continued with our virtual Christmas party and Silent Auction. Thank you to all who participated in the Auction, and to the Foundation members and Laura. The event raised $8,226 for The Foundation activities. Kelly Cluer shared with us his project of re-photographing the Comstock.

This month, Carson Richardson of the Arizona Geological Survey will share with us some work derived from his PhD Dissertation from the Shoshone Range, Nevada. His abstract is on page 3.

- The 2021 Symposium talk series will continue on the last Thursday of the month. See page 8.
- For Chapter activities, see page 6 for Winnemucca, and Las Vegas and page 7 for Elko.

We can now say **"2020 is Hindsight"**, folks! Like each of us, GSN has had to be flexible – learn to use Zoom for meetings, have an outdoor only fieldtrip, and carry out online silent auctions. Even without in-person meetings and sponsored bar events, we have maintained our numbers with membership base (Membership Directories to the printer now!). I think we can say GSN has weathered the year robustly in the face of uncertainty. As I look to 2021, I feel cautiously optimistic (yet vigilantly skeptic).

So – while Reno's fireworks events were canceled, I give you an image of what coal, saltpeter, barite, celestite, limestone and a host of mining biproducts can create! Salud!

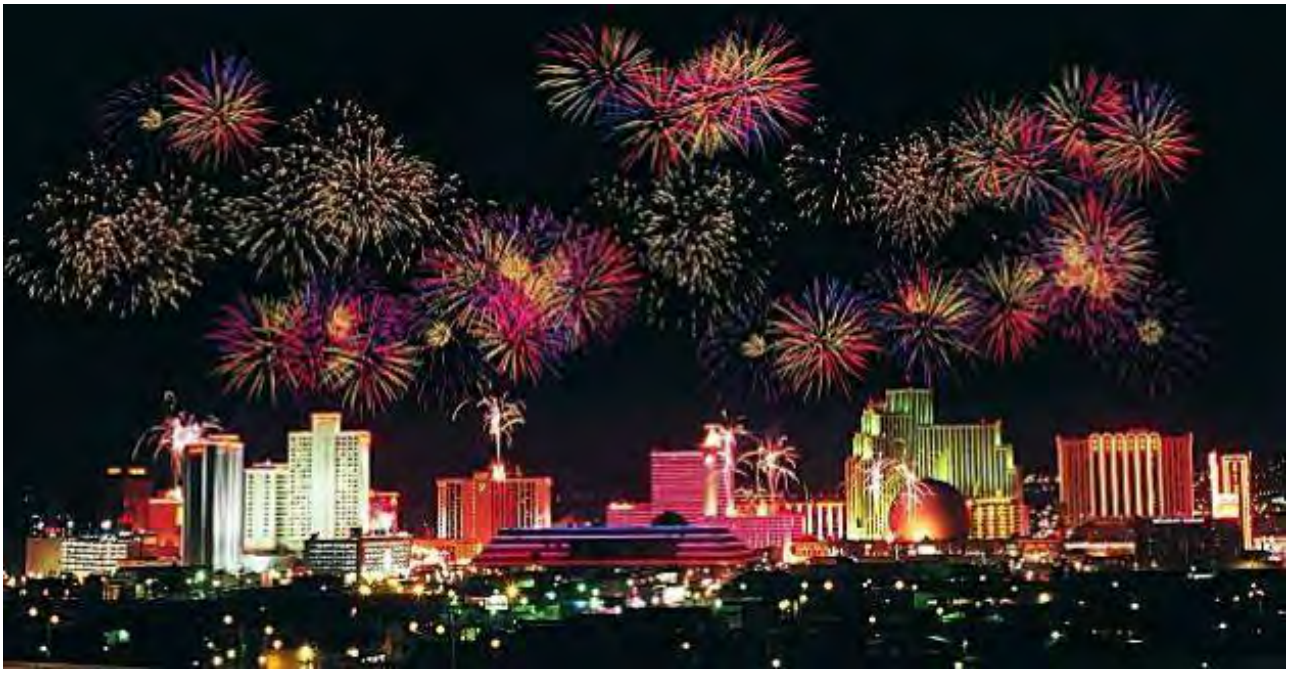


Image credit: Visit Reno Tahoe

GSN Virtual Talk: FRIDAY, JANUARY 15, 2021

Zoom Opens @ 6:15 PM, Talk begins @ 6:30 PM (Pacific)

(Zoom meeting details can be found below.)

Guest Speaker: Carson Richardson, Arizona Geological Survey

Title: "Deformation, magmatism, and ore deposits of the northern Shoshone Range, Nevada: Considerations for the exploration of Carlin-type deposits in the footwalls of folded thrust faults"

Date/Time: January 15, 2021 at 6:15 PM Pacific Time (US and Canada)

Join Zoom Meeting by clicking on the link:

https://us02web.zoom.us/j/83463898878?pwd=ci9HZ3p1aFlUUTZSVWE2dUxWMG00Zz09

Meeting ID: 834 6389 8878
Passcode: 536687

One tap mobile:
+13017158592,,83463898878#,,,,*536687# (Washington D.C); +13126266799,,83463898878#,,,,*536687# (Chicago)

Dial by your location: +1 253 215 8782 US (Tacoma) OR +1 669 900 6833 US (San Jose)

Meeting ID: 834 6389 8878
Passcode: 536687

ABSTRACT:

The northern Shoshone Range, noted for its historic Ag, Au, Cu, Pb, and Zn ores, remains one of the last areas of north-central Nevada to lack significant Carlin-type mineralization despite its proximity to the Battle Mountain, Carlin, Cortez, and McCoy gold-producing districts.

New mapping of rock types, structural geology, and hydrothermal alteration, supported by geochronology, sheds light on the original spatial relations of hydrothermal systems to intrusions in the Hilltop mining district. Rocks in the Hilltop district are tilted at least ~35-40°E, as indicated by orientations of flattened pumice fiamme and bedding in sedimentary rocks, via presently low-angle, west-dipping normal faults. The majority of the normal faults dip ~20-30°W, initiated with dips of 60-70°W, and have slip amounts up to 1 km where well-constrained. U-Pb zircon geochronology of plutons and field relations in the Hilltop district indicates the intrusive rocks represent two magmatic events, rather than apophyses connected at depth.

Several subhorizontal normal faults represent a poorly exposed older generation of normal faults. In the Lewis district to the west of Hilltop, steep dips (up to ~70°E) of the ~36 Ma tuff of Mount Lewis, as well as the underlying stratified rocks of the Antler Overlap Sequence, Golconda Allochthon, and Augusta Mountains Formation, suggest up to ~30° of eastward tilting with this generation of normal faults. The western Lewis district hosts an extensive dike swarm of N-/S-striking, largely subvertical quartz monzonite porphyry dikes dated at ~32 Ma, as well as uncommon ~37 Ma rhyolite porphyry dikes that, where well-exposed, dip ~40°W. Definitive crosscutting relations between the dikes and faults were not exposed.

This contrasts with well-documented extension by Colgan et al. (2008) in the Caetano caldera where a single set of normal faults accommodated ~40° of eastward tilting and ≥100% extension between 16-10 Ma. Several of the Caetano normal faults continue northward into the Shoshone Range. The comparable orientations, slip direction, and tilting shared between the normal faults of the Caetano caldera and the younger generation of normal faults suggest these could be the along-strike continuation of the same fault system. U-Pb geochronology and angular relations of the dikes, however, suggest that the extensional faulting in the northern Shoshone Range could be late Eocene to earliest Oligocene. The available evidence and paucity of stratified Cenozoic rocks in the northern Shoshone Range permits multiple hypotheses.

Mineralization includes weak porphyry copper-molybdenum occurrences, gold skarn, (continued on bottom of page 6)

"FACES OF GSN"

Christopher Seligman

Senior Geologist/Project Manager

Dahrouge Geological Consulting USA Ltd.

EMAIL ADDRESS: christopherj@dahrouge.com; **PHONE**: +1 (610) 308-3099

INTRODUCTION

I was born in Coatepeque, Guatemala but was almost entirely raised in southeastern Pennsylvania in a small suburban town called Kennett Square. I received my Bachelor of Science Degree in Geology and Physical Geography from Kutztown University of Pennsylvania located in, you guessed it, Kutztown, Pennsylvania.

In addition to practicing as an ore deposits geologist, I greatly enjoy industry volunteer work and presenting to students and young professionals on my journey to becoming a geologist in hopes of inspiring curiosity in higher education and teaching young minds a little bit about our truly fascinating facet of science.

While my story is likely similar to many other geologists out there, I figured I would sit down and deliver a little bit of the narrative I present to students and young professionals on how I became a working geologist.

MY YOUTH

School and its counterparts were never an interest or a strong suit of mine when growing up. None more dreaded than mathematics. While I was always curious and keen to learn, formal schooling itself was always seen as something I simply had to make it through with some self-fulfilling greener pasture awaiting after high school graduation. My interests have mostly been the same throughout my life. My early youth was filled with activities such as hiking, camping, fishing, and creek splashing. As a child, I fondly remember the great many hours spent with my parents and younger brother scurrying about the many roadside shale pits of Sullivan County, Pennsylvania in search of the various marine fossils hidden between the sheets of rock.

As I grew up, my outdoor interests remained but were steadily substituted with other activities such as extreme and competitive sports and rock band practice with my friends. The days were just packed and I did not feel like there was any reason to assume any different for the rest of my life. These days continued ignorantly and blissfully until the start of my senior year of high school when the hot topic became 'my career ahead' and 'what are you going to do with your life?"

Exploring in a shale pit; Forksville, PA; March 1998

UNIVERSITY

Uninterested in attending university at all, my parents convinced me to visit several schools and submit applications to at least three schools of interest. Although the visits went well and certainly perked my interest in the idea of attaining higher education at all, the next overwhelming issue was that I did not have a single clue of what major to declare on the applications.

After several weeks of hard thought, I decided that my ultimate dream was to pursue my longtime and deep interest in severe weather anomalies. I wanted to attend the Pennsylvania State University – Main Campus to become a meteorologist. However, and much to my dismay, a little bit of research indicated that my high school marks were, not surprisingly, not quite up to par for acceptance into the school meteorology program. Another path had to be taken.

Some more research later, the new plan was to attend a smaller Pennsylvania state school with lower application requirements for two years at which point I would be eligible to transfer to any other in-state school regardless of my high school marks or application requirements.

In the meantime, with Penn State University off the application list, I decided to refine my list of schools to those with attractive science programs and add one more school to the list for visitation before starting applications. The final pick was Kutztown University of Pennsylvania.

The town was rustic and rural. The campus small and scenic. Cozily nestled within the Amish and (continued on page 5)

Seligman, Faces of GSN (continued from page 4)

Mennonite farms and communities for which the area is known for. Perhaps for the first time, I was eager to learn more about this school and visit the science department. I remember stepping into the Boehm Science Building like it was yesterday. I walked into the building with my parents and was quickly welcomed by a very friendly professor who introduced himself as Dr. Kurt Friehauf, professor of geology, who excitedly asked if there was anywhere he could help direct us.

We explained my story and plan to attend Penn State University with curiosity as to whether Kutztown University offered any meteorology programs or paths to help pursue my goal. He explained that while the school did indeed offer a single meteorology elective, the school did not offer any formal paths or majors in meteorology. Deflated by the comment, he quickly rekindled the conversation with an invitation to his office to take a look at the meteorology course requirements at Penn State University to see how a two-year stint at Kutztown could line me up for a successful transition.

Several clicks here and a few scrolls there he said to me “well, there are, of course, a handful of program-specific courses you will need to take once you transfer but for prerequisite coursework you will need to take a series of advanced mathematics and computer courses before graduation.” He explained that while the career path may contain an exciting and attractive field component, much of the profession consists of mathematical calculations and computer-based modeling for prediction and understanding.

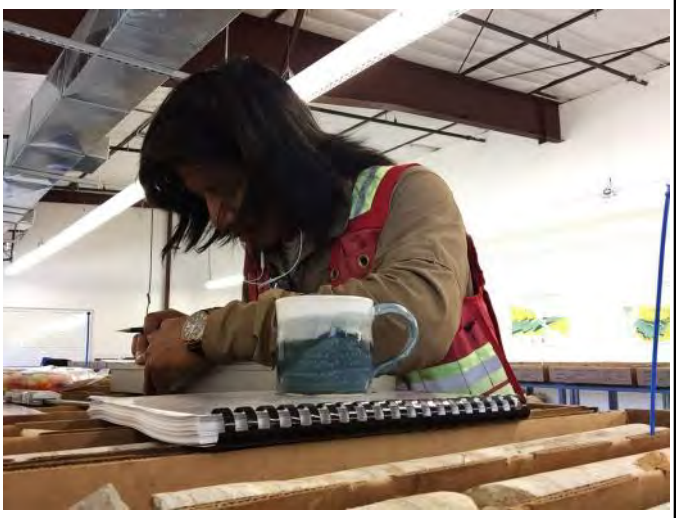
In almost an instant, I knew deep down that the meteorology major was not for me. I was enamored by the outdoors – not by desk work. With my plan seemingly shattered and my visit now twice deflated, I remember thinking “what do I do now?”

Voicing my thought to the group, Kurt spun his chair to me and asked “have you heard of geology?”

The rest is history. Four years later, I graduated from Kutztown University of Pennsylvania with a Bachelor of Science Degree in Geology and Physical Geography with my car packed for Tucson, Arizona to start my first professional job as an independent contract geologist.

MY CAREER

The vast majority of my professional career has been based out of the Tucson, Arizona region as an independent consultant under my personal company Rincon Geological Services LLC.



Logging drill core; Tucson, AZ; June 2013

Among the best of my career, these years of consulting served as an invaluable opportunity for me to establish a professional network and obtain a variety of skills and knowledge through, in many cases, a faster-on-fire approach. Consisting of numerous contracts, these jobs also gave me great exposure to some of the most prominent districts across the southwestern United States, including several in the great state of Nevada. Truthfully the best learning experiences I could have asked for.

My first contract out of university was for the Mexican-owned company ASARCO – Grupo Mexico at the Ray Mine – a giant porphyry Cu-Mo operation – which lasted for five consecutive years and lent to the bulk of my early growth and professional experience. During these contracts, I had the opportunity to learn, work, and eventually manage tasks and operations from logging core and exploration management to environmental and geotechnical practices including geophysical televiewer surveying, data capture, and data synthesis. Between contracts and down time, I had the opportunity to exercise some of these newfound skills through other short-term contracts elsewhere within the United States including California, New Mexico, Nevada, and Utah.

In 2016, I made a short move over the hill to Superior, Arizona to take a job as my first salary position with Rio Tinto on the world-class Resolution Copper Project. Putting my comprehensive skills from my former contracts to work, I further developed by taking on mentorship roles for junior geologists and Ore Deposit Knowledge projects for the Resolution Copper Project, the Bingham Canyon Mine, and various Rio Tinto Exploration projects.

In 2018, I took a leap eastward once again to greener pastures (literally) in Charlotte, North Carolina to manage the development of a world-class hard rock lithium pegmatite ore deposit within the Carolina Tin-Spodumene Belt.

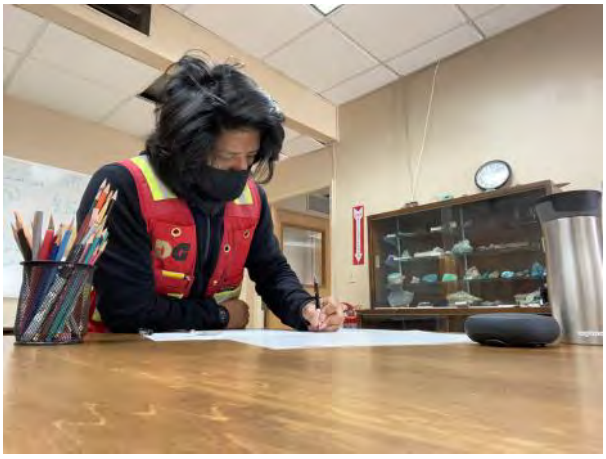
With a mission accomplished, I moved back to Arizona in early 2019 to resume independent consulting in Tucson, Arizona at the ASARCO – Grupo Mexico owned Silver Bell Mine to design and manage the annual (continued on page 6)

Seligman, Faces of GSN (continued from page 5)

exploration teams and programs.

In February 2020, I started my most enjoyable role to date and joined the team at Dahrouge Geological Consulting USA Ltd., a mining, mineral exploration, and geological program management consulting company based in Denver, CO, as a founding member and Senior Geologist / Business Development Manager.

With my current ability to practice as a consultant, work with a variety of deposit types, experience numerous projects and challenges, and continue my passion to engage with geological communities and endeavors, I feel that I have found just the right niche for myself.



Geological mapping; Kearny, AZ; September 2020

REFLECTIONS

Looking back on the last fifteen years of my life, the one thing I can say for certain is "thank you mom and dad for making me submit those university applications!"

From the hundreds of great people I have met to the dozens of places I have been, I am eternally grateful for each and every adventure and opportunity I have been a part of through my geological journey thus far.

I will surely continue to reflect some more but in the meantime, it is time to have lunch with the family and get back to searching for that next ore deposit!

GSN SO. NEVADA CHAPTER

The GSN Southern Nevada Chapter will not be hosting a Zoom meeting in January. Keep an eye out for details about our next meeting in February!

Josh Bonde, GSN Southern Nevada President

joshua.bonde@nvscicenter.org.

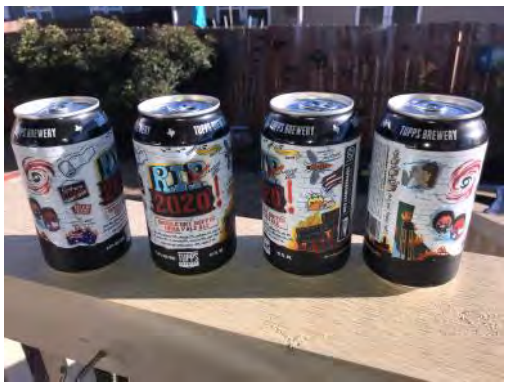
GSN Winnemucca Chapter

The GSN Winnemucca Chapter will not be hosting a Zoom meeting in January.

Chad Peters

Winnemucca Chapter President

cpeters@ridgelineminerals.com



2021 Texas Beer Humor from GSN Member Dave Emmons.

C. Richardson Abstract (continued from page 3)

precious-/base-metal vein deposits, and "upper plate" gold deposits of uncertain origin. The porphyry and precious-/base-metal vein deposits are associated with ~39 Ma granodiorites, whereas younger and older plutons of similar compositions are not well mineralized.

The precious-/base-metal vein deposits are interpreted to be the distal veins around a weakly and/or deeply buried porphyry system(s). Sodic-calcic alteration is documented at both the Park Saddle and Tenabo plutons. While some "upper plate" gold deposits (e.g., Hilltop, Tenabo) are likely not related to Carlin-type mineralization, others (e.g., Elder Creek, Slaven Canyon) could be the expression of a Carlin-type ore fluid. The "upper plate" gold deposits of permissible relation to a Carlin-type ore fluid account for >250,000 ounces of gold in the northern Shoshone Range.

Reinterpretation of previously published drill data in light of recent advances in the understanding of Cenozoic normal faulting in the area with the expected stratigraphy of the Roberts Mountains autochthon allows for deciphering whether previous drill holes pierced the Roberts Mountains thrust or a normal fault that down-dropped the Roberts Mountains allochthon onto the autochthon. Palinspastic restoration of a cross section from Horse Mountain to Gold Acres show that ~11.1 km (120%) of slip was accommodated along one set of faults that initiated at 60-70°W and tilted 40°E. Previously underappreciated Mesozoic NW-/SE-trending folds are present, with their anticlinal hinges related to the modern exposures of lower plate rocks in the range.

GSN Elko Chapter—January 2021 Update

We are excited to announce that Mr. Luke J. Schranz will be kicking off GSN Elko's 2021 season by giving a virtual talk on his MS research at the Center for Research in Economic Geology at the University of Nevada, Reno. January 21, 2021 – 7:00 PM Pacific Time (US and Canada)

Geologic Setting, Host Rocks, and Contrasting Mineralization; New Insights from Detailed Underground Mapping of the Fire Creek Mine

Abstract

The Fire Creek mine located 5 miles (8km) northwest of the town Crescent Valley in Lander County, Nevada produces high-grade gold and silver ore from a series of north-northwest striking high angle veins and faults along the western margin of the northern Nevada rift (NNR). This shallow-formed, low-sulfidation epithermal deposit hosted in Miocene volcanic rocks, intrusions, and volcaniclastic sediments occurs in a similar structural setting as the Miocene Mule Canyon low-sulfidation epithermal gold and silver deposit located 9.5 miles (15.3km) north-northwest of Fire Creek along the same structural trend.

The majority of production at Fire Creek has focused on high-grade, electrum-bearing quartz ± carbonate ± adularia veins (Type I ore) hosted in a Miocene basaltic andesite hypabyssal intrusive rock locally known as Tertiary equigranular basalt (Tbeq). However, the most recent development and mining has focused on ore associated with intense argillic alteration, fault gouge, and abundant sulfides. This refractory ore known as Type II ore is primarily hosted along faults, and to a lesser extent subvertical dike margins and subhorizontal vesicular flow tops. Mineralization here, north of the high-grade Type I veins is hosted in basaltic andesite flows, tuffaceous sediments, and autobreccias in a sequence of rocks similar to the Tmc "Mule Canyon Sequence" of the Mule Canyon Mine.

Detailed underground mapping and cross sections have revealed striking similarities between mineralization and host rocks at Mule Canyon and Type II ore and rocks which host it at Fire Creek. At Mule Canyon, both high-grade electrum-bearing banded quartz ± carbonate ± adularia veins, and disseminated ores were mined, the latter containing gold in As-rich rims of iron sulfide grains. Mineralization at Mule Canyon, some of which occurs along dike contacts, is primarily hosted in Tmc which consists of Miocene volcaniclastic strata and basalt flows.

This presentation will examine similarities and differences between the rocks which host the primarily non-refractory Type I ore and the refractory Type II ore at Fire Creek through a series of detailed maps and cross sections defining lithology, structure, alteration, and mineralization through the area where ore transitions from Type I to Type II. Petrography and geochemistry of host rocks will be discussed as well as a brief characterization of the two ore types including recently acquired electron microprobe analyses of sulfides and electrum.

Topic: GSN Elko January Meeting

Date/Time: Jan 21, 2021 7:00 PM Pacific Time (US and Canada)

Join Zoom Meeting

https://us02web.zoom.us/j/84423797106?pwd=REpQYjZ3RzdVbGRlRkRuT1d2WHhGdz09

Meeting ID: 844 2379 7106

Passcode: Schranz

One tap mobile: +12532158782,,84423797106#,,,,*9446507# US (Tacoma)

Dial by your location
+1 253 215 8782 US (Tacoma)
+1 669 900 6833 US (San Jose)

Meeting ID: 844 2379 7106

Passcode: 9446507

Find your local number: https://us02web.zoom.us/u/kWTPimi36

GSN 2021 SYMPOSIUM VIRTUAL LECTURE SERIES

Date: Thursday, January 28, 2021 at 7:00 p.m.

Speaker: Zach Grimac, Gold Standard Ventures

Title: "The Use of Geophysics in the Exploration for Carlin-Type Deposits in the Railroad District, Carlin Trend, Nevada"

Abstract:

Geophysics has been an integral part of successfully identifying and ranking exploration prospects on Gold Standard Venture Corp.'s (GSV), Railroad property on the Carlin Trend. By overlaying gravity, CSAMT, ground- and aeromagnetic, and 2D seismic data, with geological and geochemical maps and cross-sections, GSV has generated high quality, Carlin-type gold targets. As new exploration drill-hole data becomes available, the geophysical data are re-integrated and the targeting is refined. In the future, geophysics will continue to be an essential tool utilized by GSV in the Railroad mining district for the discovery of gold deposits beneath post-mineral cover and in structurally-complex terrains.

GSN Symposium Virtual Meeting: Railroad-Pinion Gold Project, NV; speaker: Zach Grimac

Date/Time: Jan 28, 2021 at 7:00 PM Pacific Time (US and Canada)

Join Zoom Meeting by clicking on this link and entering the meeting ID:

https://us02web.zoom.us/j/81353043935

Meeting ID: 813 5304 3935

One tap mobile: +16699006833,,81353043935# US (San Jose)

Dial by your location: +1 346 248 7799 US (Houston); +1 669 900 6833 US (San Jose); +1 253 215 8782 US (Tacoma)

Meeting ID: 813 5304 3935

NEWS FROM THE FOUNDATION

By Cami Prenn, GSN Foundation Chair

The year of 2020 dealt us so much uncertainty and we had to innovate in so many ways. And so it was at the Foundation. Our biggest uncertainty was our budget and what income we would have to work with. Without our normal Christmas fundraiser we didn't know how many of our programs we'd be able to support and in what amounts. The K-12 Earth Science Field Trip program didn't happen at all this year. That has been our biggest budget item historically so that takes some pressure off our ability to proceed with the other programs. The Foundation Board will be meeting in January to set the budget for the rest of the year.

The good news is that our innovative Christmas email Silent Auction delivered $8,226 to our account! I consider that a huge success given that we had nine items with which we raised that amount! We truly have some generous winners! Many of the items sold well above their stated value and we are grateful for those generous folks. That is almost 50% of what we raised last year on a much larger list of prizes! Yay for us! We also were able to take bids from members and other folks that wouldn't normally be in Reno for a live Christmas party. Four of the nine prizes went to folks outside of Reno.

It's important to recognize our prize donors again – they truly made the event happen!

Kel & Holly Buchanan
JoAnn Newbury
DD LaPointe & Tom Irwin
Steve Neilsen
Kappes, Cassiday & Associates
Mario Desilets
Jonathan Price
Bob Thomas
Cami & Neil Prenn
Bill Kolstad

But the biggest innovator that made this happen is Laura Ruud. She brainstormed with us on ways to make this happen and ultimately designed the email format that became the platform for the auction. She then kept everyone up to date with the daily emails updating everyone on the bid status and ultimately concluded the whole event. The other Foundation Board members that helped pull this off were Bob Thomas, JoAnn Newbury, Mario Desilets, Bob Felder, and Holly Walton-Buchanan (standing in for Kel). You might notice that some of them did double-duty as donors as well as their bid-watching duties. Thank you to all!

May we all give this year a proper send-off in whatever way feels appropriate. I'm pretty sure it won't be the way we're used to sending off the old and welcoming in the new.

Happy New Year to all!

NEVADA

Coeur Mining Inc. announced that it began the construction of the leach pad expansion project at the Rochester Mine. (reserve = 219,618,000 tonnes @ 0.10 gpt Au, 15 gpt Ag proven+probable) *Press Release:* October 28

Ely Gold Royalties Inc. announced that it acquired various royalties over the Railroad-Pinion Property of Gold Standard Ventures Corp. from ORTT Transactions for $3,801,000 cash and 300,000 shares. *Press Release:* November 2

Fiore Gold Ltd. announced that recent drill results at the Gold Rock Project include 117.35-123.44 meters @ 0.96 gpt Au (GR20-01); 100.58-106.68 meters @ 1.02 gpt Au GR20-03); 120.4-140.21 meters @ 0.69 gpt Au (GR20-05) and 166.12-214.88 meters @ 2.17 gpt Au (GR20-09). (resource = 9,006,000 tonnes @ 0.82 gpt Au indicated) *Press Release:* November 24

Gold Standard Ventures Corp. announced that recent drill results at the Dark Star Project include 0-19.8 meters @ 0.63 gpt Au (DR20-01); 0-61 meters @ 0.66 gpt Au (DR20-02); 0-53.4 meters @ 0.52 gpt Au DR20-03) and 27.4-259.1 meters @ 4.54 gpt Au (DR20-09). (resource = 15,380,000 tonnes @ 0.54 gpt Au measured+indicated) *Press Release:* November 18

Gold Standard Ventures Corp. announced that recent drill results at the Pinion Project include 68.6-105.2 meters @ 1.0 gpt Au (PR20-24); 187.5-265.2 meters @ 2.24 gpt Au (PR20-26); 224.1-250.0 meters @ 0.34 gpt Au (PR20-29) and 221.0-271.3 meters @ 1.04 gpt Au (PR20-30). (resource = 31,610,000 tonnes @ 0.62 gpt Au indicated) *Press Release:* November 12

Gold Standard Ventures Corp. announced that recent drill results at the LT Project include 0-24.3 meters @ 0.73 gpt Au (LT20-1); 29.0-59.3 meters @ 0.39 gpt Au (LT20-3); 0-30.5 meters @ 0.78 gpt Au (LT20-8) and 0-1.5 meters @ 0.54 gpt Au (LT20-9). *Press Release:* October 29

Metalla Royalty + Streaming Ltd. announced that it acquired Genesis Geld Corp. (private) and Geological Services Inc. (private) for 401,875 shares and $1,000,000 cash. Both private companies hold a portfolio of 9 separate property royalties in Nevada and Utah. *Press Release:* November 4

General Moly Inc. announced that it filed for Chapter 11 bankruptcy protection and that it shares were delisted from the Toronto Stock Exchange. (resource @ Mt. Hope = 1,062,500,000 tonnes @ 0.068% Mo measured+indicated) *Press Release:* November 18

Blackrock Gold Corp. announced that recent drill results at the Tonopah West/Victor Project include 581.9-583.4 meters @ 2.67 gpt Au, 223.5 gpt Ag (TW20-012C); 621.2-624.2 meters @ 3.50 gpt Au, 435.5 gpt Ag (TW20-021C); 580.0-582.4 meters @ 3.95 gpt Au, 364 gpt Ag (TW20-024C) and 535.8-538.7 meters @ 5.35 gpt Au, 545.9 gpt Ag (TW20-031C). *Press Release:* November 23

Corvus Gold Inc. announced that recent drill results at the Lynnda Strip Project include 211.84-272.8 meters @ 0.50 gpt Au (ML20-166); 249.94-292.61 meters @ 2.06 gpt Au (ML20-170) and 376.43-428.24 meters @ 0.70 gpt Au (CH20-15). *Press Release:* November 17

S2 Capital Group announced that it acquired the Taylor Property from Silver Predator Corp. for $4,750,000 cash. (resource = 8,069,000 tonnes @ 64.8 gpt Ag measured+indicated) *Press Release:* November 2

Contact Gold Corp. announced that recent drill results at the Green Springs Project include 124.97-150.88 meters @ 1.14 gpt Au (GS20-05). (resource = 754,500 tonnes @ 2.05 gpt Au inferred) *Press Release:* November 23

GRAC Global Resource Acquisition Corp. announced that it acquired an option to earn a 51% interest in the Gooseberry Property from American Pacific Mining Corp. for $50,000 cash, 2,000,000 shares and $1,500,000 in exploration expenditures over 2 years. *Press Release:* November 4

Viva Gold Corp. announced that recent drill results at the Tonopah Project include 139-140 meters @ 0.4 gpt Au (TG20-9); 34-37 meters @ 0.4 gpt Au (TG20-10) and 197-203 meters @ 1.5 gpt Au (TG20-11). (resource = 12,830,000 tonnes @ 0.79 gpt Au measured+indicated) *Press Release:* November 17

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Memories of GSN's First Symposium in 1976

by Peter Kirwin

phkirwin@comcast.net

I am writing this note with two purposes, first because it appears that the Society has no record of the event and secondly, to elicit information about it from the memories of any members who are still around and have anything to add to my recollections, almost a half century later. The symposium was held early in 1976, in Reno. Its sole subject and content was directed at Carlin type gold deposits, their location, geology and implications for exploration and mining in Nevada at that point in time. Please note that there are a large number of people, both planners and presenters, who have not been acknowledged below, due to the elapsed time and my memory. Anyone who can contribute to the memories is more than free to do so.

The meeting was a one day affair, nowhere as elaborate or as eloquent as those put on by the Society these days. No cocktail hour, no banquet. But lunch was included in the registration fee.

I do not know in whose brain the first germ of an idea about a meeting sprouted or became a gleam in his eye. It may very well have originated with one Barney Berger, who was working in the Conoco exploration office at the time. Barney had colleagues and friends throughout the state and as well as in the government agencies. So the idea could have been planted by several people. Certainly there were discussions in the Conoco office, and the other geologists there soon were "volunteered". Meetings with the Society's board and members yielded a "Yeah, let's do it attitude".

Which soon led to the obvious recognition that "you guys are a bunch of amateurs and can really screw this up". Following better advice, perhaps from members from Mackay (or as some have suggested, that the Garsides proved informative), that UNR had an office that managed events for the University and would help with one that brought recognition and participants from out of town, we contacted UNR. They were a life send. They handled publicity, inquiries, registrations, the venue, banking and almost everything else to make the event a success.

And as the reservations started to roll in, that proved a very wise solution. We held the meeting in the Holiday Inn near the University and the Reno/Sparks line. They had a large banquet/meeting room on the top floor (6th?) with views of the city, the valley and the mountains. Occupancy limited to 300 people by the fire code. When registration exceeded that limit (and our wildest expectations), we had to divert the last registrants to a near by Denny's for lunch. The greatest distance that we could determine that attendees had travelled was a few from Eastern Europe.

We had asked the speakers to forward abstracts of their talks in advance; we photo copied them, stapled them together and handed them out as the program of the day. And unfortunately for posterity. I can not find a copy of the program, and would ask anyone reading this to forward a copy to Laura for the Society's archives.

The introduction to the Subject was presented by two ranking experts from the USGS, Messers Roberts and Erickson. First the regional geology and stratigraphic setting, particularly as to the Carlin District, was presented, which at the time was the discussion Du Jour in Nevada, followed by the geochemistry of the deposits and half dozen or so reports on individual mines and advanced projects by the principles on the subjects.

Roberts presented the geological setting and Erikson the geochemistry. I recall that at least one and maybe both of the Survey geologists were unable to attend the meeting, but graciously forwarded the texts of their papers, which were delivered by members of the Society. There were either one or two papers on the Carlin District, one on the Newmont project (Carlin and surrounding ground), as well as, perhaps, a talk on the other prospects in the district at that time. John Livermore may have spoken on the discovery of Carlin and the geology of the deposit, But my memory is not clear on that. Berger spoke on Getchell, which was the grandfather of the carbonate hosted deposits at the time, as history showed. I think there were one or more papers on the nascent gold district near and south of Battle Mountain, but I do not recall that with any accuracy. We had a talk on a deposit and mine on the backside of the Oquirrh Mountains from Bingham Canyon, and I am again sorry to say I do not recall the presenter for that paper.

OTHER UPCOMING EVENTS

January 4, 2021: Denver Region Exploration Geologists' Society January Zoom Meeting, Monday, Jan. 4th at 6:30 PM **Mountain Time** (US and Canada). Social Chat—6:30 p.m. and Talk begins at 7:00 p.m. Mountain Time (6:00 pm Pacific). **Speaker: Dr. Simone Runyon. Title: "Alteration in the Roots of Porphyry Copper Deposits". Zoom Login: https://zoom.us/j/99161943568?pwd=bEpOTE01Mkt4bUh6TVg0Rlo5V3pSdz09. Meeting ID: 991 6194 3568, Passcode: 947878**

January 7 2021 Nevada Petroleum & Geothermal Society, Reno, NV NPGS Meeting will take place via Zoom on Thurs., Jan. 7th starting at 7:00 PM. **Our speaker this month will be Jon Trujillo of CalEnergy Operating Corp. His talk is titled "Injection of Hyper-saline Brine at the Salton Sea Field - Challenges and Benefits".**
Join Zoom Mtg: https://us02web.zoom.us/j/83976016367?pwd=dHNCUGU0WnJ1TmFqOTNQTE1LOVZIQT09
Meeting ID: 839 7601 6367; Passcode: 251816 . **Contact Rick Zehner for information: zehnerrick@yahoo.com**

14 January 2021 Arizona Geological Society meeting, Speakers: Jan Rasmussen and Stan Keith, MagmaChem Research Institute. Title "Mineral District and Orogenic Evolution in Arizona". 6:30 PM in Arizona. Via Zoom: **ZOOM URL - https://arizona.zoom.us/j/87210212100 . Thurs, 14 January 2021, 6:30 p.m. (Admittance to ZOOM from 6:00 p.m. on)**

January 18-19 2021 - NWRA Annual Conference! We are going virtual this year! –Monday, January 18, 2021, 9:00 a.m. to Friday, January 29, 2021, 3:00 p.m. To view the many great events going on and the conference schedule, please go to http://www.nvwra.org/2021-ac-week! For questions or more information call Tina Triplett at 775-473-5473 or nevadawaterresources@gmail.com.

January 20-23, 2021 AME Mineral Exploration Roundup, Vancouver, BC. Registration Information click here: https://roundup.amebc.ca/attendees/registration-info/.

February 2-April 27, 2021—NWRA Webinar Series on Borehole Geophysics Background and Application - Introductory webinar during the annual conference, free to conference attendees. Series of 6 webinars will be held February 2nd through April 27th and are free to NWRA members with an RSVP or $25 per webinar or a one-time purchase for all 6 for $125 for non-members. Please go to http://www.nvwra.org/webinars for more information, webinar titles or to register. For questions or more information call Tina Triplett at 775-473-5473 or nevadawaterresources@gmail.com. **(Don't forget to renew your 2021 NWRA Membership –** go to http://www.nvwra.org/join-nwra to **become a member** or renew your membership. For questions or more information call Tina Triplett at 775-473-5473 or nevadawaterresources@gmail.com.)

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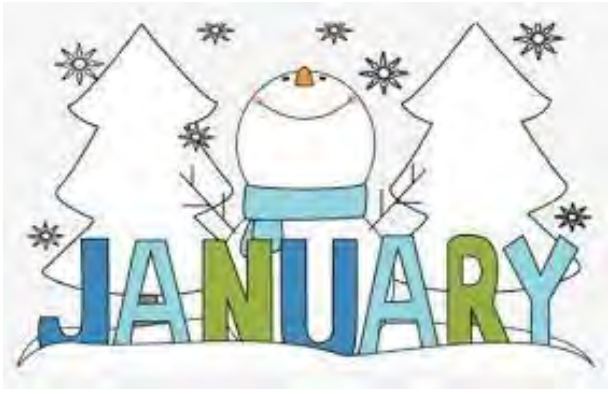

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