

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



OCTOBER 2021 ISSUE, Vol. 37, No. 7

Published monthly except June and July

PRESIDENT

Patsy Moran

Practical Geochemistry
patsy@practicalgeochemistry.com

VICE PRESIDENT

Kel Buchanan

HB Engineering Group
summitcrk@aol.com

SECRETARY

Steven Weiss

Consultant, Geologist
siraweiss@outlook.com

TREASURER

Robert Kastelic

McEwen Mining
bob_kastelic@yahoo.com

MEMBERSHIP CHAIR

Kelsey Sherrard

Terraphase Engineering
Krsherrard@gmail.com

PUBLICATION CHAIR

David Browning

browning.geology@gmail.com

DIGITAL MEDIA CHAIR

Peter O'Byrne

Target Synthesis
Peter.Obyrne@outlook.com

GSN EXECUTIVE MANAGER

Laura Ruud

gsn@gsnv.org

GSN BOARD OF DIRECTORS

Chairman

Robert Thomas

Current GSN President

Patsy Moran

Most Recent Past GSN President

Mary Stollenwerk

Elko Chapter President

Justin Milliard

So. Nevada Chapter President

Joshua Bonde

Winnemucca Chapter President

Chad Peters

Class A, 2021-2024

Robert Thomas-CHAIR
John Watson

Class B, 2019-2022

David Caldwell
Greg French

Class C, 2020-2023

David Shaddrick
Mark Travis

**OCT. 2-3, 2021
SAT. & SUN.**

GSN FALL FIELD TRIP

The 2021 GSN Fall Field Trip will visit three exploration projects, all former producers, as well as the Tonopah Historic Mining Park. All the properties are easily accessible from the Highway # 95 corridor.

**OCT. 13, 2021
WEDNESDAY
VIA ZOOM**

GSN WINNEMUCCA CHAPTER MEETING

The Winnemucca Chapter will hold their meeting via Zoom beginning at 6:30 p.m.. **Speaker: Ridgeline Minerals Team Member.** **Topic: The Selena Property.** For questions, please contact Chapter President Chad Peters at: cpeters@ridgelineminerals.com. Zoom details on page 6.

**OCT. 14, 2021
THURSDAY
VIA ZOOM
TENTATIVE**

GSN SO. NEVADA CHAPTER MEETING

The So. Nevada Chapter meeting TENTATIVELY will be held at 6:30 pm via ZOOM. Log-in Details will be disseminated the week of the meeting. **Speaker & Title: TBA.** For more information please contact President Josh Bonde at: joshua.bonde@nvscicenter.org.

**OCT. 14, 2021
THURSDAY
NOTE! 2nd
Thursday this
month!**

GSN ELKO CHAPTER MEETING

The GSN Elko Chapter will hold their in-person (& Zoom) meeting at the Western Folklife Center, 501 Railroad St. **Speaker: Neal Mankins.** **Title: "The Robertson Deposit: Eocene Intrusion Related Gold Deposit in the Northern Shoshone Range, Nevada".** **Sponsor: TIMBERLINE DRILLING.** Please contact Elko President Justin Milliard: justin.b.milliard@gmail.com for more information. Details on page 7.

**OCT. 15, 2021
FRIDAY**

GSN REGULAR MEMBERSHIP MEETING

The GSN regular meeting will be held in-person at the Reno Aces 250 Lounge, 250 Evans, Reno. **Speaker: Dr. Don Hudson.** **Title: "A Jolly Geologic Jaunt Around Great Britain".** **Sponsor: RUEN DRILLING.** Dinner cost is \$35 at the new venue. Please register for dinner online and send RSVPs to Laura Ruud, gsn@gsnv.org. Dinner link coming soon!

October 31, 2021! Abstracts are due to the GSN Symposium Technical Committee by September 30, 2021. Details can be found on page 14. Please visit the website for more information about the GSN 2022 Symposium! www.gsnsymposium.org

GSN October Reno Meeting Sponsor!



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

September was another active month for GSN. We had in-person membership meetings in Elko, Reno, and Winnemucca and a virtual meeting for our Southern Nevada Chapter. In-person attendance was lower than prior to the shutdown, which is understandable given continued Covid-19 concerns. Hopefully we'll see more people at the meetings as transmission rates go down.

The new Reno membership meeting venue at the Greater Nevada Field is spectacular. We have access to a large room with a full bar, the buffet, and ample seating, and another room that is set up for our presentations. There is also a huge outdoor area with another bar, views of the field, and places to meet up and spread out. Finding a suitable venue and working through all the bugs hasn't been easy but Kelsey Sherrard, our Membership Chair, has knocked this one out of the park. Thank you, Kelsey! As anticipated, the first meeting wasn't without it's challenges, but complaints were minimal. Our speaker, Dr. Matthieu Harlaux, didn't skip a beat when the projector imploded, and we used the other monitors to finish the presentation. His talk was recorded and will be available on the gsnv.org website soon.

For the monthly meeting in Reno, on Friday October 15th, Don Hudson will have a visually stimulating tour of Great Britain for us. We'll hop on board his trip with visits to classic geologic sites interspersed with some mining history. Our goal is to live stream Don's talk for members that will not be attending in-person. Our Elko Chapter is also planning an in-person/virtual membership meeting on Thursday, October 14th. UNR graduate student, Neal Mankins, is going to present his work on the Robertson deposit in the northern Shoshone Range. Additional GSN Chapter updates and meeting details are included in this newsletter.

The GSN Symposium Technical Committee has extended the abstract deadline to October 31st. Also, don't forget to sign up for the core shack at www.gsnsymposium.org. The core shack, which will be in the Exhibit Area, will provide a great opportunity to get information out about your company.



Greater Nevada Field (Photo credit: Rob Simpson, <https://robsimpsonphotography.com/>)

Guest Speaker: Dr. Don Hudson

Title: “A Jolly Geologic Jaunt Around Great Britain”

Date: Friday, OCTOBER 15, 2021

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

Link to pay for dinner online will be live soon!

<https://www.gsnv.org/events/gsn-regular-membership-meeting-reno-nevada/?date=1634256000>

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

Abstract:

The United Kingdom is the site of some of the earliest geologic studies. Such luminaries as James Hutton, William Smith, Charles Lyell, Adam Sedgewick, Roderick Murchison, and Charles Darwin helped to establish the science of geology, based upon their interests in defining the natural history beneath their feet.

In 2017, I embarked on a tour of Scotland, England, and Wales to, in part, to visit some of the classic geologic sites as well as some of the mining history. From the soggy heaths of northwest Scotland to the tip of Cornwall, my travels took me to the first mapped thrusts, to the first described ancient caldera, to tectonic sutures to the tip of Cornwall, and to a classic unconformity. From Archean gneisses to active mudslides. From Pleistocene glacial lake shorelines to Carboniferous volcanoes. From Triassic dinosaur tracks to Jurassic ammonites. From flotsam and jetsam of continents and continental fragments to ophiolites.

Interspersed with all that were mine visits ranging from Bronze Age, to Roman, to Middle Ages, to Victorian, and to recent. From orogenic gold to cave-filling iron. From tin veins and greisens to epithermal (?) lead-zinc veins. From VMS to MVT. From coal to kaolin.

Photos Clockwise from top left:

Castlerigg

Parys Mountain

Keltie Water

Levant Mine



“FACES OF GSN”

Thomas Feehan

Reno, Nevada



Hello everyone. I was born in 1971 and raised in an old mining town in Southwestern Wisconsin. Though I didn't necessarily understand the geologic and mining history of the area as a kid, I was always fascinated with landforms. Having been born and raised in the driftless area, I spent a lot of time outdoors exploring creeks and rock outcrops. I am the youngest of seven kids and was fortunate to have my two oldest brothers become mining engineers. That led to some later discoveries in college and internships at mining operations in Tennessee and Arizona.

I recently visited my old hometown, and my elementary school is now the mining museum. My best friend still lives on a site that was an old smelter in the early 1900's. The small sinkholes in the yard of my childhood home, were caused by subsiding underground workings under the local neighborhood and are still present today. I never knew that the Mississippi Valley Deposits of the area provided so much work and wealth until later in my life.

Fast forwarding out of the awkward teenage years, the first years of college were less than disciplined. Though I had earned a physics scholarship to a private school, I didn't have a true interest in the subject. That said, the initial plan was to become a hydraulics engineer and earn a dual physics and engineering degree in 5 years between the private school and a large state school. Fortunately, with the help of my brother Mark Feehan, I ran into a few geologists working as a summer student at mines in Eastern Tennessee during the summers of 1990-1992. I genuinely liked their style, comradery, and let's face it, the engineering students with whom I studied (loose term), always looked at their shoes. The geologists on the other hand, drank beers until they looked at other people's shoes. Some didn't wear shoes at all and enjoyed being outdoors. Not a bad gig I thought so I transferred to Illinois State University (ISU) where I earned a BS in Geology in 1994. At the same time, ISU was starting a program in Hydrogeology, and I wound up earning a scholarship to obtain an MS Degree in Hydrogeology which was completed in 1996. During that time, my desire to travel further afield became very pronounced. I worked in mines in Arizona and for the City of Boulder, Colorado during the summers of 1994 and 1995. I knew at that point that, down the line, the intermountain West would become home in one form or another.

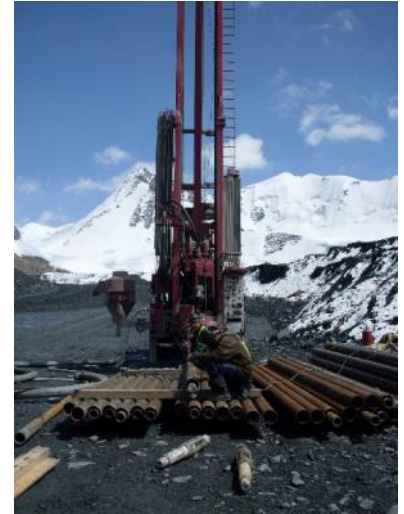
In 1996, I started working at Barrick Goldstrike Mines in Elko as a hydrogeologist and began working on drilling rigs. I worked all the time on the drills and found a love for mine dewatering at one of the largest mine dewatering operations in the world. As an added benefit, the drillers were even more interesting characters than the geologists. Some of the drillers from that time I still work with today and it was great. I had a lot of fun, learned a ton about myself, drilling and mining. Those "formative" years provided a mountain of information for me to take forward but there was now a different desire – to leave the country. I was afforded that opportunity when Barrick Goldstrike reorganized and I wound up on the organizational chart reporting to my oldest brother and Mine Manager, Mike Feehan. That was not going to work out for Barrick, and I resigned a short time later and took a position with Newmont Minera Yanacocha in Peru in early 2000. I was working in mine dewatering, out on drill rigs, learning to speak Spanish and figuring out what the experience of life could be living in a foreign country. That job was short-lived however and with gold prices in the tank (\$250), I was bought out of my contract in 2001 and returned somewhat dejectedly to Elko. I had however, met some consultants who took me under their wing and provided for the next chapter in my life.

In October 2001, I opened an office for Water Management Consultants doing mine closure and dewatering work in Elko. In 2002, we moved that office to Reno, added staff and Joost Reidel moved up from Bolivia to become the operations manager. Joost remains a good friend today. With Nevada as a training ground, some good people around, and great projects, I learned tons from 2002-2004. I then began taking on roles at mines throughout Latin America from 2004 to 2007. I also completed an MBA during this time as having my own business was always something I wanted to do. I was a pretty busy guy to say the least but would not trade those times for anything.

In 2007, I decided that it was time to go out on my own and set-up the "greatest of all ideas" (that's actually what we called it), which was setting up a small drilling company in Mexico. It turned out much differently than that and I will spare all the details of death and divorce but sometimes that is how life goes. In a nutshell, I lost a good friend and business associate to a rig accident (failure to secure a vehicle), which in-turn led to financial losses, family feuds and an eventual divorce. In brief, my good friend was a diamond driller and we had married sisters in Peru before Newmont bought out my contract. He was "field operations" and I was "office guy" figuring out what it meant to run a business. I didn't have a clue at first, and then he died within a week of starting our first contract in Mexico. It was a hard time for everyone, and I mean a really hard time. I had two small kids, no home to go to, (cont. on page 5)

needed a job and in my mind, I just had to keep moving forward. I added a consulting arm to the business and travelled back and forth to Reno from Mexico from 2007 to 2011 spending 50% of the time with my two kids. I also added an equipment arm to buy and sell used drilling equipment and did a year-long labor contract in 2008-2009 in Kyrgyzstan operating three drill rigs for mine dewatering. That was a super interesting job drilling through waste rock which had been piled onto a moving glacier. I could do a whole piece just on that job and have given that to others in the past.

In 2010, as part of the consulting arm of the company, I picked up some lithium brine work in Argentina. I set about learning arid climate hydrogeology, salar/playa characteristics, brine geochemistry, remote logistics and developed methods for drilling, sampling and performing hydraulic testing in the high Andes in Northern Argentina. I opened an office in Salta, Argentina in late 2010 and started a drilling company there in 2011. The company struggled at times however it was better than Mexico which had turned very violent in some areas due to drug cartels. I closed the Mexico office in Guadalajara in 2011, moved what equipment we could to Argentina and sold the rest. Another "greatest of all ideas" scenario but if you are familiar with Argentina at all, it can be a very difficult place to do business. It turned out to be all of that and then some. I "officially" left the country with my tail between my legs in 2015. To make ends meet, I freelance consulted and helped manage Connors Drilling in Nevada and its transition to First Drilling from 2013 to 2015.



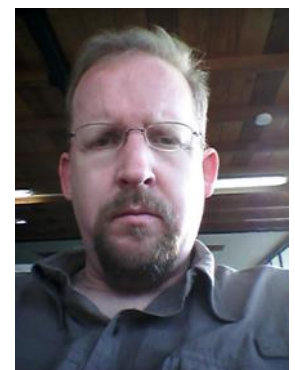
In that process, I think it was Elizabeth Zbinden that said it best. To paraphrase, she suggested that it might be easier to get a jersey where I could just sew on patches with all the company names and point to which one(s) I was working with that week. What I think she meant was that I had gotten to know a lot of people through the years, had 20 plus years of experience and could do a very broad range of projects and management.

Throughout the years I have had the opportunity to work with a lot of great people including those of the GSN. I have been fortunate enough to work in many regions of the US as well as on projects in Argentina, Bolivia, Canada, Chile, Columbia, Ecuador, Guatemala, Honduras, Kyrgyzstan, Mexico, Mongolia, Nicaragua, Panama, and Peru.



Fast forwarding again, in 2016, Al Frank, whom many of you know well, called and asked if I would like a job. Boart Longyear (Boart) was looking for a protégé for Darrell Tweidt in Business Development. Darrell was headed toward retirement (that is maybe better said for the moment as "was/still is/maybe/possibly/working part time/could retire soon but not sure") and someone would have to backfill the role. I wasn't too keen on the idea of working for a larger organization. I thought I could only back-fill the role as there is no filling Darrell Tweidt's shoes, but it was a good opportunity. I accepted the position in April of 2016 and though I still do some commercial contracts for Boart in Surface Coring, I have migrated to the role of US Business Development Manager. Boart currently operates over 70 drills in the United States and over 320 rigs globally.

I am fluent in English and Spanish. I love live music and good food. I have a 20-year-old son studying chemical engineering and a 16-year-old daughter who lives with me full time. She studies the art of breaking her dad's balls. Both are good at what they do.





GSN WINNEMUCCA CHAPTER MEETING—via ZOOM!



WEDNESDAY, OCTOBER 13, 2021

6:30 p.m.—8:00 p.m.

SPEAKER: Ridgeline Minerals Team Member

TOPIC: The Selena Property

Join Zoom Meeting:

<https://us02web.zoom.us/j/83242851117?pwd=OC9DUmNiV0ZaUmw3QXFuT2tQaTI2dz09>

Meeting ID: 832 4285 1117

Passcode: Winnemucca

One tap mobile:

+12532158782,,83242851117#,,,,*6619137309# US (Tacoma)

Dial by your location: +1 669 900 6833 US (San Jose)

Meeting ID: 832 4285 1117

Passcode: 6619137309

Find your local number: <https://us02web.zoom.us/j/khPvGMOM2>

Please contact Chad Peters, Chapter President, for more info. cpeters@ridgelineminerals.com



GSN SO. NEVADA CHAPTER MEETING via ZOOM!

TENTATIVE! THURSDAY, OCTOBER 14, 2021

6:30 p.m.—7:30 p.m.

Speaker& Title: To Be Announced

Please contact Chapter President, Josh Bonde, for more info. joshua.bonde@nvscicenter.org



AAPL America's Landmen "Field Landman Seminar"

Thursday, October, 14 2021 at the Western Folklife Center, ELKO, NV

Schedule

**10:30AM - 11:00AM—Registration—\$60 includes dues
(Click here to Register Online: [AAPL SEMINAR](#))**

**11:00AM - 12:00PM—BLM's New MLSR System Demonstration, Barry Bonnett, Supervisory
Land Law Examiner, Elaine Guenaga, Mineral Leasing Specialist**

12:00PM - 1:00PM—Hosted Lunch

1:00PM - 2:00PM—Title Pitfalls, Deborah Goetz, PHD, CPL, Mineral Land Consultant

GSN Elko Chapter—October 2021 Update

The Elko GSN Chapter is excited to host one of last year's GSN Elko Scholarship recipients, Neal Mankins of the Center for Research in Economic Geology at the University of Nevada Reno. He will be speaking on research insights of the Robertson Deposit. The event is graciously hosted by Timberline Drilling Inc.



The event will be held at the Western Folk Life Center on a slightly different day to accommodate scheduling conflicts, the second Thursday of October 14th.

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

Title: The Robertson Deposit: Eocene Intrusion Related Gold Deposit in the Northern Shoshone Range, Nevada

Presenter: Neal Mankins, Center for Research in Econ. Geology

Authors: Neal E. Mankins,¹ John L. Muntean,¹ Matthieu Harlaux,¹ and Robert A. Creaser²

¹*Ralph J. Roberts Center for Research in Economic Geology, University of Nevada Reno, Reno, Nevada*

²*Department of Earth and Atmospheric Sciences, University of Alberta, Edmonton, Alberta, Canada*

Abstract:

The Robertson deposit, formerly known as "Tenabo", is located in Lander County within the Bullion mining district about 7 km north of Pipeline, a 20Moz+ Carlin-type gold deposit in the northern Shoshone Range, Nevada. Robertson is an Eocene intrusion related gold deposit primarily hosted in Paleozoic sedimentary rocks within the Roberts Mountain allochthon known as the "upper plate." Historically, gold was discovered in the Tenabo area in 1905, when a series of gold-bearing quartz veins and shear zones were found, producing nearly 10,000 ounces of gold from 1906-1912. Gold mineralization is spatially and temporally related to an intrusive complex, "the Tenabo stock", which is composed of successive intrusive phases including an early diorite, polyphase ilmenite-bearing granodiorite, and later dikes that vary in composition from dioritic to rhyolitic. Most of the previously defined gold mineralization occurred near the contacts of intrusions and is hosted by hornfels in the overlying lithologies. Ongoing exploration has discovered significant free visible gold both within the stock and in more distal settings within metasedimentary host rocks. Intrusion-related gold deposits in Nevada are not well documented and Robertson may provide new insights into this style of mineralization supplementing other studies at Bald Mountain, Buffalo Valley, and Copper Canyon.

The purpose of this study is to characterize gold mineralization as it relates to intrusive phases, alteration styles, and structural controls by combining fieldwork, petrography, geochemistry and geochronology. (continued on page 8)

This study is the first in depth examination of Robertson focusing on gold mineralization within intrusive phases and in distal settings, presenting six new U/Pb LA-ICP-MS ages of intrusive phases, and one molybdenite Re-Os age, constraining emplacement ages of igneous units and associated alteration and mineralization. A paragenetic sequence of mineralization and alteration events at Robertson was constructed based on field relationships, drill core logging, assays, and structural data.

The emplacement of the Tenabo stock produced contact metamorphism of the host siliciclastic lithologies yielding quartz, biotite, and calc-silicate hornfels aureole. As a result of field mapping, core logging, and applied petrography, successive hydrothermal alteration phases have been identified, including potassic alteration, endo/exoskarn, sericitic, and chloritic alteration. Previous studies along with this work indicate that gold occurs as disseminations and in quartz veins within intrusive units and host metasedimentary rocks. Gold consists of native particles that range in size from 2 to 200 microns having strong associations with As-Bi-Te-Se-S sulfosalts, spatially adjacent to or on the surface of arsenopyrite and loellingite grains. Ongoing petrographic observations of veins at Robertson indicate the succession of three main stages referred as 1) pre-gold “early,” 2) syn-gold, and 3) post-gold “late.” The pre-gold stage includes barren quartz veins, potassic alteration veins comprised of biotite (EDM veins and/or secondary K-feldspar), quartz – chalcopyrite ± pyrrhotite, and quartz – molybdenite veins. The syn-gold stage is composed of quartz – gold ± bismuth – loellingite – arsenopyrite veins. Finally, the post-gold veins encompass quartz – pyrite, quartz – calcite – sulfide “base metal veins” (Pb-Zn-Sb-Ag-Sn bearing sulfides), and calcite veins.

Cross-cutting relationships along with our geochronological data indicate that gold mineralization at Robertson resulted from the emplacement of a reduced ilmenite-bearing igneous stock into siliciclastic sedimentary lithologies forming a high-tonnage, low-grade gold deposit characterized by a Au-Bi-Te-Se-S metal association. Based on petrographic evidence, we infer that mineralizing conditions for gold precipitation were under relatively low sulfur fugacity and oxidation state leading to preferential formation of minerals such as native Bi, arsenopyrite, and loellingite, typical of low-sulfidation assemblages.

Please see their websites for more information:

Timberline Drilling Inc.

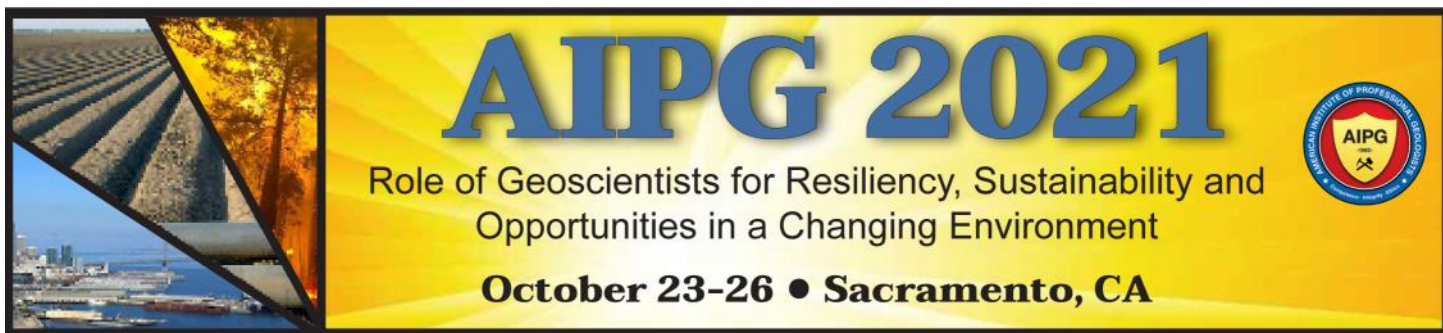
Incorporated in 1996, Timberline Drilling, Inc. is headquartered in beautiful Coeur d’Alene, Idaho and supported by our field office in mining hub Elko, Nevada. We are a leading underground and surface core-drilling contractor in the United States. Our ability to deliver quality core samples, on time and on budget, from meticulously clean and safe drill sites, has made us the go-to contractor for several clients. Our goal is to create long-term relationships with every customer we have the pleasure to serve. <https://timberline-drilling.com/>

Ralph J. Roberts Center for Research in Economic Geology (CREG)

CREG is a partnership between the Mackay School of Earth Sciences and Engineering, the Nevada mining industry, and the U.S. Geological Survey. These partners pool their resources to fund research that is both fundamental in understanding the genesis of mineral deposits and applicable to the discovery and production of mineral deposits. The original mutually supportive goals of the CREG program continue to be to:

1. Prepare well-educated professionals for careers in the Mining Industry and Research by exposing them to a wealth of expertise within the School, the industry, and the USGS.
2. Produce and publish high-quality research results on topics of critical interest to the Nevada mining industry.

The CREG program is a center of study and learning that is leading to a greater understanding of the geology, geochemistry, geophysics, genesis and exploration of mineral deposits, especially Nevada’s famous Carlin-type gold deposits, which make the U.S. the third leading gold producer in the world. The pooled resources within CREG are mainly used to fund graduate students to complete Masters and PhD theses in the Department of Geological Sciences and Engineering at UNR. <http://www.nbmng.unr.edu/CREG/>



AIPG NATIONAL CONFERENCE

AIPG will host its National Conference as an in-person event experience where all individuals onsite, including attendees, guests, speakers, staff, and venue personnel, remain safe and comfortable throughout our event. We are continuing to monitor the COVID-19 pandemic through federal, state, and local authorities. Website: <https://aipg.org/page/2021CANationalConference>



Nevada Geology Calendar 2022

The **Nevada Geology Calendar 2022** from NBMG is **available now for preorder.**

\$10 – preorder now until October 15

\$12 – price after October 15

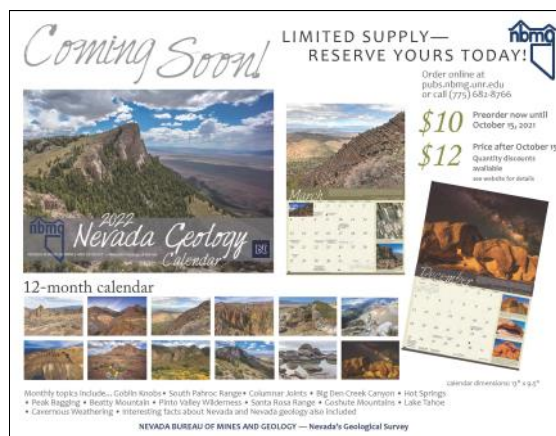
Order from Nevada Bureau of Mines and Geology (NBMG):

Online: <https://pubs.nbmng.unr.edu/Nevada-geology-calendar-2022-p/cal2022.htm>

Phone: 775-682-8766

Pickup: 2175 Raggio Pkwy, Reno

The calendar will be **available for pickup and shipping on October 15.**



Geological Society of Nevada

“Vision for Discovery: Geology and Ore Deposits of the Basin and Range”

GSN 2022 Symposium Call for Papers with Revised Due Dates And Call for Confirmation of Intent to Present Talks Accepted for 2020

The GSN 2022 Symposium Technical Committee has continued updating and confirming the programs of talks and posters planned for the week of May 2nd, 2022 at the Nugget Casino Resort in Sparks, Nevada. As noted in April, the committee is soliciting new talks, talks submitted for 2020, and revisions of talks submitted previously. The committee has pushed back the deadline for submitting draft abstracts by two months to September 30th. Please see the revised schedule for submitting abstracts and papers below. The review of options for virtual presentations continues.

In 2022, final abstracts will be available as a digital addendum to the conference program pamphlet available on the symposium website or on an app to be available for smart phones at symposium. Papers new for 2022 will be published in an addendum to the 2020 proceedings. At present, the committee plans to publish the addendum for digital download and, possibly, as a limited edition softbound paper volume. A schedule for release of the proceedings is under review.

If your 2020 abstract will be acceptable for 2022, you do not have to revise. Those scheduled speakers/poster presenters who did not write a paper for 2020 are encouraged to do so for the 2022.

If you plan to update your 2020 paper for 2022 please be sure that it is substantially new data, material, or interpretation. Duplicated 2020 versions for 2022 will not be accepted. Please indicate the new material and discuss with us. You may rewrite your 2020 abstract for your talk &/or poster to include a small or large amount of new material.

DUE DATES SUMMARIZED

Draft Abstracts Due: OCTOBER 31, 2021

Final Revised Abstracts Due: MARCH 1, 2022

Draft Manuscripts Due: OCTOBER 31, 2021

Final Revised Manuscripts Due: MARCH 15, 2022

Final revised papers in by March 15 should be available at least in digital download at the May 2022 Symposium. Those and later finalized papers should be available for purchase by late-summer 2022 as both digital downloads, USB, or a soft-bound Proceedings Volume. We will be rather strict about these due dates.

GSN 2022 SYMPOSIUM APPRECIATES OUR SPONSORS!

Many Thanks to Our Sponsors

PLATINUM LEVEL PATRONS



GOLD LEVEL PATRONS



GOLD RESOURCE CORPORATION
NYSE American: GORO

SILVER LEVEL PATRONS



BRONZE LEVEL PATRONS



COPPER LEVEL PATRONS



Odin D. Christensen
Hardrock Mineral Exploration Inc.



Erwin Thompson Faillers



Moira Smith

Debra Struhsacker
Environmental Permitting
& Government Relations



GSN SYMPOSIUM APPRECIATES OUR SPONSORS!

ZINC LEVEL PATRONS



David Morris
North American
Exploration, Inc

Fleetwood Koutz



Elizabeth Zbinden
Independent Geologist
& Geochemist

Dave Shaddrick

FIELD TRIP SPONSORS



2020 SYMPOSIUM CO-HOSTS



GEOLOGICAL SOCIETY OF NEVADA



GSN SYMPOSIUM 2022

RESCHEDULED

Vision For Discovery

April 29 to May 8, 2022

Nugget Casino Resort

Reno-Sparks, Nevada

****SCHEDULE****

Technical Sessions, MAY 2-5, 2022

Field Trips

Short Courses

Trade Show

Core Shack

Sponsorships Available

*****INFORMATION*****

www.gsnsymposium.org/

Office Manager phone: 775-433-8758

GSN has rescheduled the in-person meeting to Spring 2022 to assure the health and safety of our members and attendees. We appreciate your continued interest and support in the transition to the 2022 dates. There will likely be changes to the Technical Program, Field Trips and Short Courses. We have received support from those involved to accommodate changes.

Mining Activity Update

Mike Brady, AUGUST 2021

LMBrady@aol.com

NEVADA

Nevada Copper Corp. announced that full production of 5,000 tpd at the Pumpkin Hollow Mine will be delayed until the 1st half of 2022 (was 4th quarter of 2020) due to the slower than anticipated development of the underground workings. (reserve = 350,636,000 tonnes @ 0.47% Cu, 0.07 gpt Au proven+probable) *Press Release: August 17*

Yamana Gold Inc. announced that it acquired an option to earn a 100% interest in the Raven and Callaghan properties from Orogen Royalties Inc. for \$300,000 cash and \$4,625,000 in exploration expenditures over 5 years. *Press Release: August 11*

Paramount Gold Nevada Corp. announced that it acquired an option to earn a 100% interest in the Bald Peak Property from Ely Gold Royalties Inc. for \$300,000 cash over 4 years. *Press Release: August 26*

Gold Standard Ventures Corp. announced that recent drill results at the POD Project include 33.5-41.1 meters @ 0.29 gpt Au (RR20-02); 3.1-15.2 meters @ 2.07 gpt Au (RR20-04); 7.1-38.4 meters @ 0.53 gpt Au (RR20-30) and 0-34.3 meters @ 1.50 gpt Au (RR20-32). (resource = 28,925,000 tonnes @ 0.58 gpt Au measured+indicated) *Press Release: August 3*

Getchell Gold Corp. announced that recent drill results at the Fondaway Canyon Project include 104.0-129.9 meters @ 4.7 gpt Au (FCG21-08). (resource = 2,050,000 tonnes @ 6.18 gpt Au indicated) *Press Release: August 25*

American Pacific Mining Corp. announced that it acquired an option to lease the Red Hill Property from private interests for \$25,000/year payments. *Press Release: August 9*

Gold Bull Resources Corp. announced that recent drill results at the Sandman Project include 76.2-166.2 meters @ 0.60 gpt Au (SA-031). (resource = 18,550,000 tonnes @ 0.73 gpt Au indicated) *Press Release: July 28*

Barrick Gold Corp.(61.5%) announced that reserves at the Carlin Open Pit Mine aggregate 147,967,000 tonnes @ 2.21 gpt Au proven+probable. (was 162,600,000 tonnes @ 2.15 gpt Au proven+probable) *2020 Annual Report*

Barrick Gold Corp.(61.5%) announced that reserves at the Carlin Underground Mine aggregate 30,894,000 tonnes @ 9.17 gpt Au proven+probable. (was 30,894,000 tonnes @ 9.59 gpt Au proven+probable) *2020 Annual Report*

Barrick Gold Corp.(61.5%) announced that reserves at the Cortez Open Pit Mine aggregate 84,550,000 tonnes @ 1.52 gpt Au proven+probable. (was 92,683,000 tonnes @ 1.35 gpt Au proven+probable) *2020 Annual Report*

Barrick Gold Corp.(61.5%) announced that reserves at the Cortez Underground Mine aggregate 17,886,000 tonnes @ 9.38 gpt Au proven+probable. (was 17,886,000 tonnes @ 9.91 gpt Au proven+probable) *2020 Annual Report*

Barrick Gold Corp.(61.5%) announced that reserves at the Long Canyon Mine aggregate 5,040,000 tonnes @ 2.21 gpt Au proven+probable. (was 7,967,000 tonnes @ 2.48 gpt Au proven+probable) *2020 Annual Report*

Barrick Gold Corp.(61.5%) announced that reserves at the Turquoise Ridge Open Pit Mine aggregate 42,276,000 tonnes @ 2.03 gpt Au proven+probable. (was 55,284,000 tonnes @ 1.95 gpt Au proven+probable) *2020 Annual Report*

Barrick Gold Corp.(61.5%) announced that reserves at the Turquoise Ridge Underground Mine aggregate 27,642,000 tonnes @ 10.92 gpt Au proven+probable. (was 29,268,000 tonnes @ 10.90 gpt Au proven+probable) *2020 Annual Report*

Silver Elephant Mining Corp. announced that based on recent studies at the Gibellini Project, resources aggregate 22,950,000 tonnes @ 0.286% V2O5 measured+indicated and 14,970,000 tonnes @ 0.175% V2O5 inferred. *Press Release: August 30*

It's Time to Renew Your Annual GSN Membership Dues! Please click here to renew online: <https://www.gsnv.org/my-account/>

IF YOU WOULD LIKE TO PAY WITH A CHECK, PLEASE DOWNLOAD THE RENEWAL FORM HERE AND MAIL IT IN TO THE GSN OFFICE!

[GSN MEMBERSHIP FORM](#)

2nd Annual Brian Morris Memorial Trap Shoot Wrap Up

It was a great day on Sept. 18th to get outside and have a friendly trap shoot competition in memory of our dear friend Brian Morris. The teams registration, silent auction, live auction plus all of the generous sponsors and donations netted about \$11,000 for the Brian Morris Scholarship which is managed by the GSN Foundation! Thank you to Chad Peters and John Marma for organizing the event! Special thanks to **Brian Goss and Rangefront Mining Services** for their generous donation of all of the food and drinks for the day. A big thank you also to all of the sponsors that made this event a success! **Bosch Motors, Cyanco, CGS Mule, Envirotech Drilling, The Hennessey Family, Paul & Joyce Huet, Legarza Exploration, Major Drilling, NISS, Paragon Geochemical, Rangefront, Redcor Drilling, Ridgeline Minerals, Silver Peak Promotions, Warren & Deborah Thompson, Timberline Drilling & Walsh Reclamation.**



FRANK W. DICKSON November 28, 1922—September 6, 2021



Frank W. Dickson, geochemist, passed away on September 6, 2021 at the age of 98 from complications of Covid19. He was preceded in death by his dearly beloved wife, Elizabeth Rose Dickson (1925-2009), his daughter Catherine Elise (Santa Monica, CA; 1947-1949), and his sons Frank Woodrow (Galveston, TX; 1948-2012), Bruce William (Atlanta, GA; 1952-2020), and Donald George (Minneapolis, MN; 1959-2012). He is survived by two daughters, Elizabeth Elaine Dickson (Wakefield, RI) and Leslie Anne Gergen (Charleston, SC), nine grandchildren and eight great-grandchildren.

Born in Texas on November 28, 1922, as a young child he moved with his family to California for a better life. He attended Mark Keppel High School in Alhambra, CA, where he was recognized for his outstanding academic abilities. During World War II, he served three years in southern China with the Signal Corp of the US Army Air Corp.

Frank attended the University of California, Los Angeles receiving a BA Geology in 1950, a BSc Chemistry in 1953 and a PhD Geology in 1955. He was awarded a Phi Beta Kappa Scholar, Sigma Xi Honor in Science, and Phi Lambda Epsilon in Chemistry. He was a Fulbright Scholar, 1972-1973, and a Guggenheim Fellow in 1974. His professional associations included Geological Society of America, Geological Society of Nevada, American Geophysical Union, American Mineralogist, and the American Association Advancement of Science. The mineral, *frankdicksonite*, BaF_2 , was named in his honor.

Following graduation, Frank was a research scientist with Shell Oil in Houston, TX. From 1954-1969, he was a professor and chairman of Geology at the University of California, Riverside and later, between 1969 and 1979, he held these same positions at Stanford University. He conducted sabbatical research during 1972-1973 at the Geological Museum at University of Oslo, Norway and during 1976-1977 at the Department of Scientific and Industrial Research, Wellington, New Zealand.

Between 1980 and 1984, he was a research scientist at Oak Ridge National Laboratory in TN. Following retirement in 1986, he was an adjunct research professor in the Department of Geological Sciences at the University of Nevada, Reno.

Well known for his keen intelligence, curiosity and strong opinions, he was widely read and enjoyed discussions ranging from science, politics, history, and linguistics to philosophy. He contributed numerous scientific papers, advised students' research, stimulated non-traditional discussions, and pushed beyond traditional thought. He traveled throughout the world, experiencing nature, culture and local geology. He was loved and will be greatly missed.

GSN Member: JUANITA (SAMANEIGO) COLLINS February 24, 1951 - August 17, 2021



Juanita Collins, age 70, passed away peacefully on August 17, 2021 at Renown Hospital, Reno from complication of pneumonia. She was born February 24, 1951 to Manuel Samaneigo and Felicitas Sanchez in Corpus Christi, Texas. She follows Jim Collins, her loving husband and companion of 35 years to defend the gates of Heaven. She is survived by her sisters Theresa Carmona (Corpus Christi, TX) and Maria Guadalupe Trahan (Corpus Christi, TX), her brother Jesus Manuel Samaneigo (Corpus Christi TX), and her life companion Harry J. Botsford (Spring Creek, NV).

Juanita joined the United States Air Force in June 1979 where she worked as an Information Management Technician doing cryptography and analysts. Her time in the Air Force had her traveling to Germany and with Special Operation groups throughout the theatre of operation. Her expertise in

her job made her top pick to SAC Headquarters. She served 20 years and retired out as a Technical Sergeant in September 1991. After retirement, she and Jim spent their retirement as gold prospectors in Colorado and Nevada. She had a passion for gold mining and an uncanny ability to speak to slot machines (ATMs as Harry called them). She was a life member of the Veteran of Foreign War Auxiliary. Juanita had an ability to make people smile and had a love for life. She will be greatly missed by all who knew her.

A celebration of life for Juanita was held on Sunday, October 3, 2021 at the Veterans of Foreign War (VFW) Post 2350 hall, Elko Nevada, at 1300 hours (1-PM).

(Published by Elko Daily on Sep. 4, 2021.)

OTHER UPCOMING EVENTS

October 7, 2021: NPGS Membership Meeting. The meeting will begin at 7:00 PM via Zoom and our speaker will be Christopher L. Martin (C.L. Martin) of Martin Geothermal LLC who will be giving a talk entitled "Utilizing direct-use geothermal energy to improve roads during winter conditions in the Reno-Tahoe region, USA ". Join Zoom Meeting: <https://us02web.zoom.us/j/86086437396?pwd=aVlCL2xLRUtnNjhzNHk2b09tM2M0Zz09>
Meeting ID: 860 8643 7396
Passcode: 701362

October 12, 2021: The NMEC (Nevada Mineral Exploration Coalition) 2021 Annual Mineral Exploration Summit! 11th ANNUAL MINERAL EXPLORATION SUMMIT, Atlantis Casino & Resort, Reno, NV
Contact Dave Shaddrick, dshaddrick@aol.com. Register online at: <https://nvmec.org/2021-ames>

October 12-13, 2021: NWRA 2021 Minerals & Mine Water Management Symposium. Held at the Nugget Casino Resort in Sparks, Nevada. Register by September 1, 2021 for early rates. Go to <http://www.nvwra.org/2021-symposium> for Symposium information, program information and registration. For questions or more information call Tina Triplett at 775-473-5473 or nevadawaterresources@gmail.com.

October 23-26, 2021: AIPG Annual Meeting; Role of Geoscientists for Resiliency, Sustainability and Opportunities in a Changing Environment, Sacramento, CA. Submit abstracts at:
<https://aipg.org/page/2021ACallforAbstracts>

MAY 2-5, 2022: GEOLOGICAL SOCIETY OF NEVADA'S SYMPOSIUM 2022! Nugget Resort, Sparks/Reno Nevada. Technical Sessions, Field Trips, Short Courses, Exhibits, Luncheons, Parties! Visit the Website for more information: WWW.GSNSYMPIUM.ORG

PAID ADVERTISEMENTS



FOR SALE!

SPECIAL, RARE and OUT OF PRINT GEOLOGICAL BOOKS, REPORTS AND MAPS

WILLIAM D. BURSTOW CPG, QP
610 BROWNLEE DR., HENDERSON, NV 89015-1721
Tel: 702 837-6859 Cell: 541 589-3220 Email: minexbooks@gmail.com



After 50 years of precious and base metals exploration, with a primary focus in the Western USA, I am winding down my economic geology, consulting practice. (Almost) everything is for sale as follows:

***PUBLICATIONS** from federal, state and provincial agencies, societies, associations, private entities, textbooks and misc. articles.

***MAPS** - Domestic (USA) and international – topographic, geologic, geochemical, geophysical, mineralogical and misc. publications.

***PROJECT/PROPERTY FILES** – North, Central and South America, Mali, Eritrea, Turkey and South Korea, from 1975 to 2014.

***HISTORICAL EXPLORATION FILES** – 55 years (1904 - 1959) of PM/BM exploration property reports from western USA and Mexico.

***FIELD EXPLORATION SUPPLIES** – soil/rock chip, cloth/polyester fabric sample bags, tags, notebooks, flagging/wire stakes with flags, gold pans, sample sieves, aluminum map holders and plastic scales.

***CLAIM STAKING SUPPLIES** – metal tags, plastic vials and string boxes.

***FIELD EQUIPMENT** – backpacks, vests, rain gear, geo picks, hammers, shovels, hard hats, hiking boots (size 12 - 13) and compasses.

***LARGE GEOLOGIC MAP OF USA** (74" x 42") with wooden frame.

***AND MUCH MORE DATA.**

Please contact Bill Burstow with your specific requests or topics of interest, at your convenience. Discounted pricing on all of the above. Tel: 702 837-6859 Cell: 541 589-3220 Email: minexbooks@gmail.com



Serving Mining in Nevada Since 1992

General Engineering Contractor

**Drill Pads
Road Building
Reclamation
Earthwork**

Office: 775-753-5832

Mobile: 775-934-1837

www.legarza.com

NV License #84449

GoldRoyalty

A Leading Growth and
Americas-Focused
Precious Metals
Royalty Company

NYSE American: **GROY**

- Premier Operating Partners With Americas Focus (Concentration in Nevada and Québec)
- Balanced Portfolio of 191 Royalties Across Cash Flowing, Development, and Exploration Assets
- Large Nevada property portfolio with drill-ready projects available for sale or option
- Strong Balance Sheet of approx. \$45 M in Cash and Marketable Securities, No Debt
- Experienced Management Team with Track Record of Creating Value

**NEVADA PROJECT
GENERATION**

Contact: Jerry Baughman

Mobile: 702-592-6992

Email:

jbaughman@goldroyalty.com



GOLD ROYALTY CORP. (GROY: NYSE AMERICAN)

1050 WEST GEORGIA STREET, SUITE 1050, VANCOUVER, BRITISH COLUMBIA, V6E 2Y5 CANADA

TOLL FREE: 1 (833) 396-3066 EMAIL: INFO@GOLDROYALTY.COM WEBSITE: GOLDROYALTY.COM TWITTER: [@GOLDROYALTYCORP](https://twitter.com/GOLDROYALTYCORP)

FORAGE
ORBIT GARANT
DRILLING

Drift Exploration Drilling, Inc.,
6120 Pedroli Lane, Winnemucca, NV



Contractor License No.
Nevada: 0059509 | California: 1060257

For more information please contact Garth Patterson

Phone: 403-601-4374

Email: Garth.Patterson@orbitgarant.com

Cell: +1-775-720-8894

Donald G. Strachan

Geologist M.S. CPG QP

Economic Geology and Hydrogeology
Mining - Exploration and Development

**Mineral Consulting
Geologic Mapping
Geochemical Surveys
Discovery Drill Programs
Deposit Development
Project Management
Resource Planning**

www.geostrachan.com

dgstrachan@yahoo.com

Post Office Box 4046, Carson City, Nevada 89702



**BUREAU
VERITAS**

MINERALS



Bureau Veritas Minerals

Analytical Laboratory Services for the Exploration & Mining Industries

- Assaying and Geochemical Analysis
- Metallurgy and Mineralogy
- Spectral Services
- Mine Site Laboratories
- Environmental Services

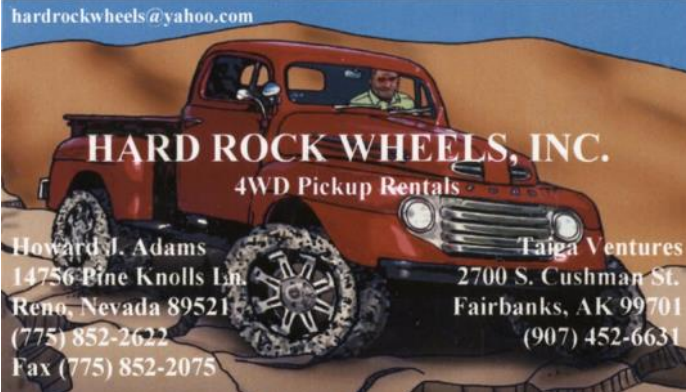
+1 800 990 2263

bvmininfo@ca.bureauveritas.com
www.bureauveritas.com/um

ELKO +1 775 777 1438
FAIRBANKS +1 775 303 8896
JUNEAU +1 907 750 1734
RENO +1 775 359 6311

PAID ADVERTISEMENT

hardrockwheels@yahoo.com

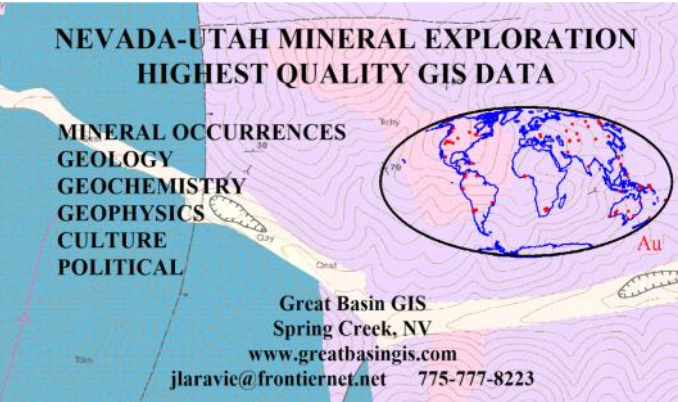


HARD ROCK WHEELS, INC.
4WD Pickup Rentals

Howard J. Adams Taiga Ventures
14756 Pine Knolls Ln. 2700 S. Cushman St.
Reno, Nevada 89521 Fairbanks, AK 99701
(775) 852-2622 (907) 452-6631
Fax (775) 852-2075

NEVADA-UTAH MINERAL EXPLORATION
HIGHEST QUALITY GIS DATA

MINERAL OCCURRENCES
GEOLOGY
GEOCHEMISTRY
GEOPHYSICS
CULTURE
POLITICAL



Great Basin GIS
Spring Creek, NV
www.greatbasingis.com
jlaravic@frontiernet.net 775-777-8223

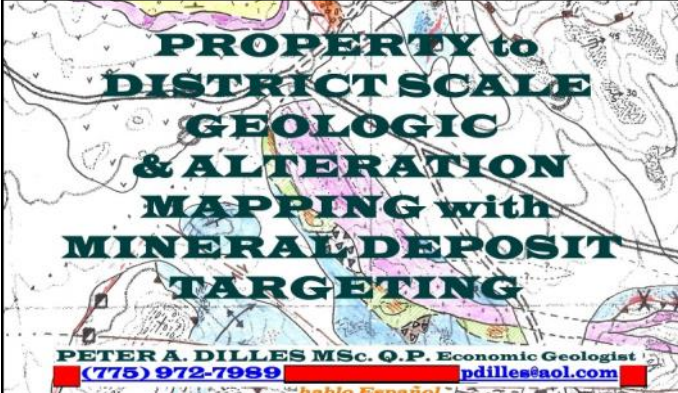
NORTH AMERICAN EXPLORATION
GEOLOGY • CLAIM STAKING • GEOCHEM SAMPLING • LANDWORK



DAVID MORRIS
PRESIDENT • GEOLOGIST

895 N. MARSHALL WAY, SUITE A 801.546.6453
LAYTON, UT 84041 DMORRIS@NAE-XPLORATION.COM

**PROPERTY to DISTRICT SCALE
GEOLOGIC & ALTERATION
MAPPING with
MINERAL DEPOSIT
TARGETING**



PETER A. DILLES MSc. Q.P. Economic Geologist
(775) 972-7989 pdilles@aol.com
hablo Español




PROVIDING ACCURATE, DEPENDABLE, AND DOCUMENTED RESULTS!

EQUIPPED. EASY. EFFICIENT. DEPENDABLE.

GEOLOGICAL SERVICES
CONTRACTING AND CONSULTING



CONTRACT LABOR
Contract Geologists
Contract Geotechnicians

FIELD CREW SERVICES
Claim Staking
Soil Sampling

TECHNICAL SERVICES
Geology Consulting
Project Management

TRUCK RENTALS
RENO. ELKO. SALT LAKE CITY



**EXPLORATION PROJECT
AND MINE SITE READY**

OFF-ROAD TIRES
*INCLUDING SPARE
4WD
TOOL BOX
FIRE EXTINGUISHER

CALL 775.753.6605 FOR A FREE ESTIMATE ON YOUR NEXT PROJECT.
WWW.RANGEFRONT.COM

TOM CARPENTER

CONSULTING GEOPHYSICIST

5445 Goldenrod Drive
Reno NV 89511
(o) 775.849.9707
(e) tcarpenter@gbis.com

WANTED

I'm interested in purchasing private Au, Ag, Cu and U exploration datasets from the Western US
Call or email Wade Johnston at 970 903-6696 or
wadejohnstonexploration@gmail.com

CASH REWARD

JBA WORKS, INC.

Jo Beth Allen
Geologist

Professional Map & Data Graphics

GIS / CAD Drafting
Technical Presentations & Graphic Design

Phone: 775-303-6818

JoBethAllen@sbcglobal.net

Big Sky Geophysics

Clark Jorgensen, M.Sc.
Geophysicist

*Field Work
Processing
Interpretations*

P.O. Box 353
Bozeman, Montana 59771
USA

Phone/Fax +1 (406) 587-6330
Mobile +1 (406) 580-9718
clark@bigskygeo.com

**For more details, my background, and case studies,
Visit my webpage at www.bigskygeo.com**



OREAS North America Inc

- ✓ Huge range of stock
- ✓ 6 x Carlin Gold CRMs
- ✓ Shipped within 48 hours

Contact our team today oreas.ca



Carlin Trend Mining Supplies & Service

369 - 5th Street, Elko, Nevada 89801
775.778.0668 www.carlin-trend.com

Claim Staking - Soil Sampling - Land Research
Core Cutting - Mine Hazard Fencing - Reclamation
Project Management - Geological Consulting
Geology & Drafting Supplies - AutoCad & GIS

Temporary Employees in All Fields
Sister store located in Superior, Arizona
Copper Triangle Mining Services 520-689-5200



Chris Ioannakis, Managing Director, Analytical Services

Corporate Office

1500 Glendale Avenue
Sparks, NV USA 89431-5902
Telephone: (775) 356-0606
Fax: (775) 356-1413

Elko Office

2320 Last Chance Road
Elko, NV USA 89801-4852
Telephone/Fax : (775) 738-9100

E-mail: AALADMIN@aallabs.com
Website: www.aallabs.com

Selling a royalty?

Any commodity, any jurisdiction.

Contact: Tom Mair – 720.280.6613
TMair@EMXRoyalty.com



We'd like to talk with you!

Looking for prospective mineral properties?

We offer properties in a broad spectrum of commodities, jurisdictions and deposit types with reasonable terms.

Contact: Jeff Edelen – 415.613.0387
JEdelen@EMXRoyalty.com

EMX ROYALTY CORP
TSX.V: EMX
NYSE AMEX: EMX

ALS expands network



Right Solutions · Right Partner
alsglobal.com

New Geochemistry location in Twin Falls



For more information on ALS and our locations visit
alsglobal.com/geochemistry



JUST REFINERS (USA), INC.
540 & 620 Greg St. – Sparks, Nevada 89431
Telephone: (775) 331-1663 / Facsimile: (775) 331-1799
Website: www.justrefiners.com

Since 1993



Please contact us if you have material not listed here.

JRI – Specializing in processing of spent carbon and borax slag!

Products JRI Processes

Borax Slag
Spent Carbon
Carbon Fines
Graphite Crucibles
Furnace Linings
Baghouse Dust
Mill/ Mine Concentrates
Gold and Silver Matte
Gold Scrap
Electrolytic Mesh
Spent Cathode Steel Wool
Alluvial Gold
Dore Gold Silver Bullion
Dental Scrap – Au, Pt, Pd
JEWELRY SCRAP
SILVER SCRAP
PLATINUM GROUP METALS

Contacts: Bobby Boekhoud: bobby.justrefiners@gmail.com / Carmen Arbizo: carmen.justrefiners@gmail.com

GEOLOGICAL SOCIETY OF NEVADA



gsn@gsnv.org • www.gsnv.org
Telephone (775) 323-3500
Fax (775) 323-3599
2175 Raggio Parkway, Room 107
Reno, NV 89512 USA

NEW DATES FOR IN-PERSON EVENT! GSN SYMPOSIUM 2022—VISION FOR DISCOVERY

APRIL 29-MAY 8, 2022

Nugget Casino Resort, Reno/Sparks, Nevada

This includes Pre- and Post-Meeting Field Trips and Short Courses

<https://www.gsnsymposium.org/>

The 2020 Proceedings are still available for purchase as a 2-volume hardbound set (\$250 + shipping), USB drive (\$100) or digital download (\$100). These can be ordered online through the GSN Symposium Website. Here is a direct link to the order page:

<https://www.gsnsymposium.org/technical-proceedings-volumes/>