



# GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Room 107, Reno, NV 89512  
(775) 323-3500 - Hours Tuesday -- Friday, 9 a.m. to 4 p.m. Monday by appointment.

Website: [www.gsnv.org](http://www.gsnv.org) • E-mail: [gsn@gsnv.org](mailto:gsn@gsnv.org)



April 2019, Vol. 35, No. 4

Published monthly except June and July

## CALENDAR OF GSN EVENTS

### PRESIDENT

Richard Bedell  
Renaissance Gold  
[rbedell@rengold.com](mailto:rbedell@rengold.com)

### VICE PRESIDENT

Dennis Bryan  
Consultant  
[dpbryan@sbcglobal.net](mailto:dpbryan@sbcglobal.net)

### SECRETARY

Steven Weiss  
Consultant, Geologist  
[siraweiss@outlook.com](mailto:siraweiss@outlook.com)

### TREASURER

Bob Kastelic  
McEwen Mining  
[bob\\_kastelic@yahoo.com](mailto:bob_kastelic@yahoo.com)

### MEMBERSHIP CHAIR

Molly Hunsaker  
Hunsaker Inc.  
[mollymhunsaker@aol.com](mailto:mollymhunsaker@aol.com)

### PUBLICATION CO-CHAIRS

Ruth Carraher, C&M Consultants  
[racarraher@gmail.com](mailto:racarraher@gmail.com)

Shannon Gill, Kinross Gold  
[shannon.gill@kinross.com](mailto:shannon.gill@kinross.com)

### EXECUTIVE MANAGER

Laura Ruud, [gsn@gsnv.org](mailto:gsn@gsnv.org)

### GSN BOARD OF DIRECTORS

Chairman  
Robert Thomas

Current GSN President:  
Richard Bedell

Most Recent Past GSN President  
Kelly Cluer

Elko Chapter President  
Nathan Wright

So. Nevada Chapter President  
Joshua Bonde

Winnemucca Chapter President  
Matthew Fithian

Class A, 2018-2021  
Robert Thomas-CHAIR  
John Watson

Class B, 2016-2019  
David Caldwell  
Greg French

Class C, 2017-2020  
David Shaddrick  
Camille Prenn

### NO MEETING THIS MONTH!

### SO. NEVADA CHAPTER MEMBERSHIP MEETING (1st Thursdays)

Due to a scheduling conflict with the venue we are going to not be having an April event. For So. Nevada members who need their science fix they can check in with the Las Vegas Science and Technology Festival. The festival includes free science events for the public from April 26 to May 4<sup>th</sup> across southern Nevada. April is also Nevada's Paleontology Awareness Month. Please contact Chapter President, Joshua Bonde for more information @ [paleo@lvnhm.org](mailto:paleo@lvnhm.org). See pg. 4 for more information.

### April 17, 2019 WEDNESDAY



### WINNEMUCCA CHAPTER MEMBERSHIP MEETING (2nd Wednesdays)

The meeting will be held at the Martin Hotel, 94 W. Railroad St., Winnemucca, NV. Refreshments/appetizers at 6:00 pm; Talk at 7:00 pm. **Speaker: Wiley Skewes, Equinox Gold. Topic: "Dealing With Complexity: Geologic Modeling of the Castle Mountain Epithermal Deposit"**. **FOOD & DRINKS SPONSOR: TBA.** Please contact Matt Fithian @ [Matthew.Fithian@ssrmining.com](mailto:Matthew.Fithian@ssrmining.com) for more information. Details on pg. 7. Abstract on pg. 14.

### April 18, 2019 THURSDAY

### ELKO CHAPTER MEMBERSHIP MEETING (3rd Thursdays)

The monthly meeting will be held at the Western Folklife Center, 501 Railroad St., Elko, NV. Refreshments begin at 6:00 pm. Talk begins at 7:00 p.m. **Speaker and Topic: To Be Announced. FOOD & DRINKS SPONSORED BY: NATIONAL EWP!** For more info please contact Nate Wright @ [Nathan.wright@newmont.com](mailto:Nathan.wright@newmont.com). Details on pg. 7.

### April 19, 2019 FRIDAY

### GSN REGULAR MEMBERSHIP MEETING

The location is again at Great Basin's Taps & Tanks, 1155 S. Rock Blvd. Reno, NV. Drinks @ 6:00 pm, APPETIZERS @ 6:30 pm, Awards @ ~7:15 pm. **STUDENT POSTER NIGHT!** Attendees will have time to talk to the students about their research. **DRINKS SPONSORED BY: GEOTEMPS, INC! Appetizers only for \$15—prepay online or pay at the door.** GSN Students are free. For more info contact Laura Ruud at [gsn@gsnv.org](mailto:gsn@gsnv.org) or 775-323-3500. Details on page 3. **To PREPAY for appetizers please click on this link: <https://squareup.com/store/GSNV>.** No reservations required but avoid the line by pre-paying!

### June 1-2, 2019



The Spring GSN field trip will be heading to the northern Mother Lode and beyond in Northern California. Details on page 10.

## G.S.N. APRIL MEETING SPONSOR



**FROM THE PRESIDENT**  
**Richard Bedell, GSN President 2018-2019**  
**APRIL 2019**

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The April meeting in Reno will be the presentation of student posters from students at the University of Nevada Reno. One of GSN's goals is to mentor and support student activities so they can be long term contributors to Nevada geology. The GSN Foundation helps supply money for field trips kindergarten through high school. Scholarships have also been provided to junior colleges.

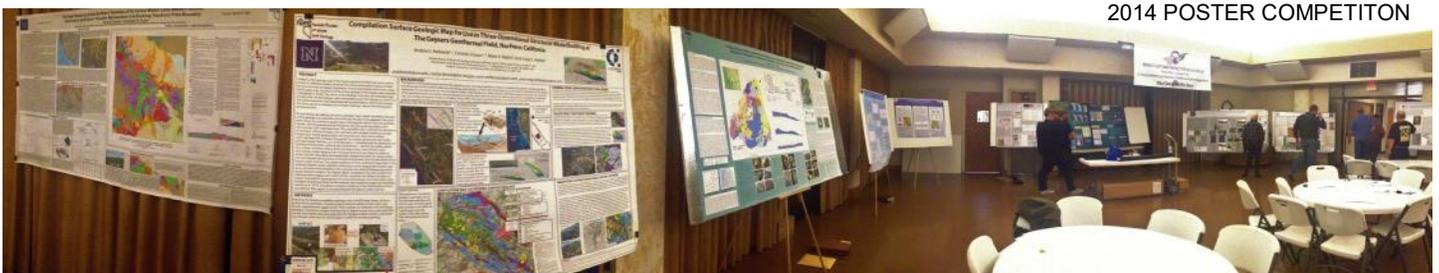
At the university level GSN has also provided funds for field camp. Recently the GSN - D.D. LaPointe scholarship has reached almost \$200,000 to fund university students interested in economic geology and the first one is destined to be given in the Fall of 2019. In addition, there is another scholarship brewing through the foundation that would be for funding these making fundamental contributions to Nevada Geology. We hope that these university level grants through GSN will continue to drive student interest in our organization and provide a crop of fertile minds to help our knowledge grow.

In addition to scholarships students can help out on field trips and get a free pass. Students get free dinners in Reno to encourage them to come and the venue change to Taps & Tanks has certainly provided more of a younger turn out.

So please attend the April meeting and enjoy posters from students at UNR providing a diversity of geoscience topics.

We should all be proud of what GSN has accomplished for student support and it is getting better!

Richard Bedell  
Current GSN President



***The G.S.N. wishes to thank  
EM STRATEGIES  
for sponsoring the Reno meeting  
in March!***



# GSN MEMBERSHIP MEETING—APRIL 19, 2019

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## STUDENT POSTER NIGHT!

Instead of a speaker, attendees will have time to talk to the students about their posters.

**Social Hour begins @ 6:00 pm; \$15 APPETIZERS @ 6:30 pm; Awards @ ~7:15 pm**

**Posters will be set up around the room by 6:00 p.m. so everyone has time to read them all.**

**LOCATION: Great Basin's TAPS & TANKS, 1155 So. Rock Blvd., Reno, NV  
(ENTER ON McCARRAN BLVD.)**

### APPETIZERS COST—\$15.00 PER PERSON

**To Pre-pay for APPETIZERS please click here: <https://squareup.com/store/GSNV>**

No reservations required but you can avoid the payment line at the door if you prepay.

For more information contact the GSN office: Email—[gsn@gsnv.org](mailto:gsn@gsnv.org) or call 775-323-3500

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## GSN Student Poster Competition Titles (so far!)

Victoria Auerbach, undergraduate, title is "Annual and Long-Term Mars Northern Seasonal Cap Recession Observed with MARCI."

Ian Pierce, PhD. Title: "Accommodation of plate motion in an incipient strike-slip system: the Central Walker Lane"

Nicholas Hillemeier, MSc. Title: "Controls on epithermal Gold-Silver mineralization, alteration at the Gravel Creek deposit, Elko County, Nevada"

Colin Chupik, MSc. Title: "Paleoseismic Assessment of the Warm Springs Valley Fault, Nevada, and Implications for a Distributed Rupture Pattern"

Kathleen Rodrigues, MSc. Title: "Assessing the potential of volcanic glass as a new luminescence geochronometer"

**CALLING ALL STUDENTS!!** We are still seeking poster entries for the Student Poster Night at the next GSN meeting on Friday, April 19th at Taps & Tanks. **Cash prizes of \$300, \$200 and \$100 will be awarded to the first, second and third place winners respectively.** All students who attend will have their dinner and drinks comped for the evening.

**Any student who has a Geoscience poster can enter!**

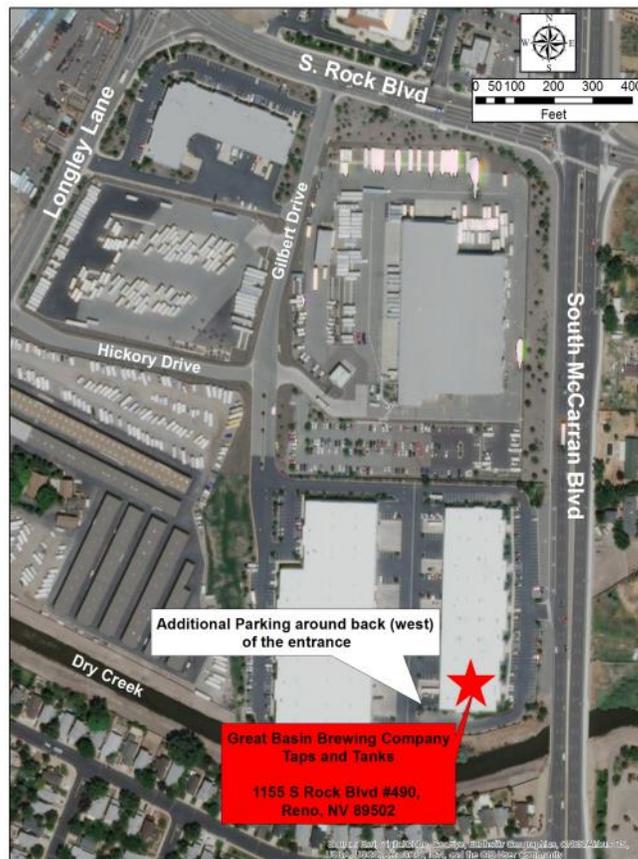
**CASH PRIZES AWARDED TO TOP 3 WINNERS!!**

**Please contact Steve Weiss to enter: [siraweiss@outlook.com](mailto:siraweiss@outlook.com)**

## Directions to “Taps & Tanks” in Reno

To find in Google or Apple maps just key in Great Basin Brewing Company (Taps and Tanks). The address is 1155 So. Rock Blvd #490, Reno, NV 89502 **but the entrance is actually on McCarran just south of Pembroke/Rock.** If you are coming from I-80 take the E. McCarran Exit, Exit 19 and go south. Taps and Tanks will be on the west side of the road about 4 miles down. If you are coming from down south it is fastest to take Exit 61 for south Virginia Street then take Longley Lane (NE) to Rock Boulevard (East) then turn south onto S. McCarran Blvd. Taps and Tanks will be on the west side of the road.

**NEW TIMES!! Doors will open at 6:00 pm as usual, then \$15 APPETIZERS SERVED at 6:30 pm.**



## GSN SOUTHERN NEVADA CHAPTER MEETING

**Due to a scheduling conflict with the venue we are not going to have an April event.**

For Southern Nevada Chapter members who need their science fix, they can check in with the Las Vegas Science and Technology Festival. The festival includes free science events for the public from April 26 to May 4<sup>th</sup> across southern Nevada. April is also Nevada's Paleontology Awareness Month. Please contact Chapter President, Joshua Bonde for more information @ [paleo@lvnhm.org](mailto:paleo@lvnhm.org).

ALSO: The UNLV Geoscience Department will host its **14<sup>th</sup> annual GeoSymposium on April 26<sup>th</sup>-27<sup>st</sup>, 2019**. In order to continue growing, GeoSymposium will now be held in the **STAN FULTON BUILDING** on the UNLV campus. The symposium is a student-run event, designed to provide graduate and undergraduate students with an opportunity to present their original research and receive feedback from members of industry, government professionals, academic experts and members of the community.

KEYNOTE SPEAKER:

**Colby Pellegrino, Director of Water Resources, SNWA.** Colby will be discussing the status of hydrologic conditions in the Colorado River Basin and what steps have been taken to protect the community against drought impacts, including the Drought Contingency Plan developed by the Colorado River Basin States.

REGISTRATION DEADLINE IS APRIL 5TH! Click on the link to register or to find out more information:

<https://geoscience.unlv.edu/geosymposium/registration/>

# “FACES OF GSN”

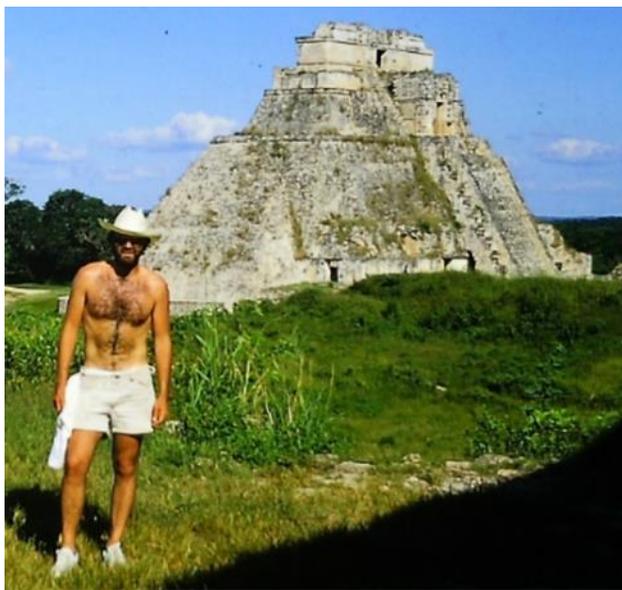
## Richard Bedell, Reno, Nevada

I hated math and science until I took an innocuous Natural History course at Hampshire College in Massachusetts whereby the first lecture went straight into the chart of nuclides and formation of the universe. This was immediate graduate level geochem taught by a brilliant young Prof. fresh out of MIT named John Reid. First lecture I was hooked. Undergraduate was brutal trying to get the math, chemistry, and physics I shunned for literature and history in high school. Nonetheless, I was able to use the five college system in Amherst Massachusetts to the max and got 5 graduate courses under my belt from UMASS as well as getting my senior thesis into an AGU talk on sulfide/oxide equilibria in ultramafic xenoliths. Summers I mined pegmatites in Maine and had an internship one summer at the American Museum of Natural History (AMNH) in NYC X-raying Ca-Pb tungstates and molybdates.

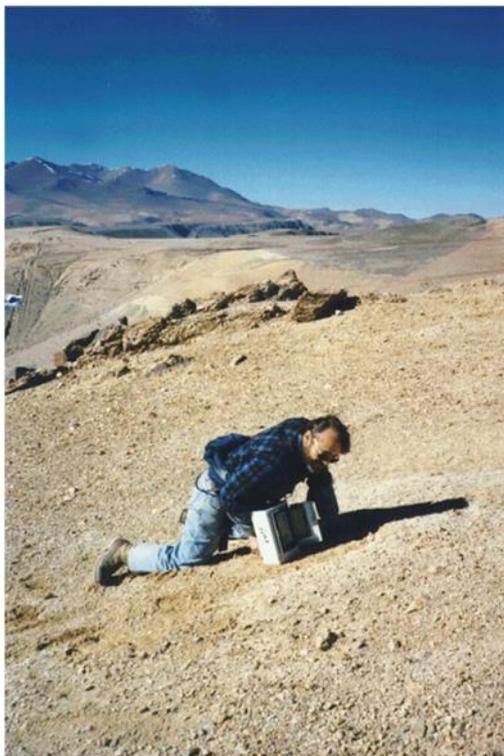
After graduating I got a NASA grant through the AMNH to do petrography and probe work on a select class of meteorites called mesosiderites. It was an exciting time because the lunar program was winding down after sucking out as much information as could be had out of the lunar samples, so support moved to meteorites.

We called ourselves the department of comparative planetology to sound cool. Also, for about 5 months I was seconded to Mount Sinai Hospital where the latency period for asbestosis was defined. They had a new analytical SEM and needed some mineralogical assistance because asbestos is a morphological term and a number of minerals fit the bill.

Fun stuff, but I really wanted to study ore deposits and follow up the what I found as an undergraduate student. One sample from a clinopyroxenite dike in a xenolith from the mantle underneath Hawaii had an immiscible high MgO ilmenite melt that then precipitated an immiscible sulfide melt. Raining sulfides in the upper mantle was so cool. Experimental work by Tony Naldrett at University of Toronto nailed the solubility equations and I got interested in U of T which had a plethora of economic related geologists, not to mention J. Tuzo Wilson. I got three offers for full funding two of which were microprobe focused. Screw that, I took the field structural study of uraniferous pegmatites for the active Madawaska Mine in Bancroft Ontario. In addition, I had part of a summer doing exploration for tantalum in SE British Columbia and was party Chief one summer for RioCanex (Canadian exploration arm of Rio Tinto) in the Maritimes of Canada with projects in New Brunswick, Gaspee Peninsula and Newfoundland. Learned a lot and had a great time, then headed to London UK rationalizing that a lot of global exploration was financed out of there. I landed a research geologists job at BP Minerals for SEDEX deposits globally. Very interesting for a year but I could see that base metal prices were not too hot and they just opened an office in Singapore. I wrote to them and asked to work on some of the classic epithermal gold systems in SE Asia. They said show up in June (1984) and this was December. I gave appropriate notice and flew to India in early January and went overland from there. Two months in India with some time with the Kerala geological survey looking at chrysoberyl bearing pegmatites. Trekking around the back of the Annapurna massif in Nepal, then Burma, Thailand, Malaysia, and Singapore. At BP in Singapore after reviewing data throughout SE Asia I was sent into the middle of Kalimantan to work on the Sampit epithermal gold project. First pan in a stream was stunning with cinnabar and gold. Are we having fun now? (continued on pg. 6)



Mexico 1981—University of Toronto Field trip.



Mid 90's doing spectral analysis in Chile for Homestake.

The contract was for only a few months so I headed back around the rest of the world including an underground tour at Mt. Isa., a transect of the Mine sequence at Broken Hill, and of course opals in Cooper Pedy.

Back in London in 1985 I got a job at Geosurvey International who just got bought out by a wealthy Egyptian group and got hold of all the mining concessions in Northern Tanzania. I worked on data compilation with ex-Tanganyika survey folk with a lot of stereo airphoto interpretation and Landsat MSS imagery. I was then chosen to be the guy to cruise around by myself in a custom Land Rover to review potential targets. My number one choice for follow up after my review was Mara which became a Barrick Mine.

Back to London and decided to take another M.Sc. in Remote Sensing and GIS. I had been using this data and just decided far more could be done with it if the geo who knew the project tweaked the data rather than some data processing guy. That was a quick one year and then did a bunch of consulting including a grant from the European Space Agency to review geologic applications of radar throughout Europe. This was in preparation for the new European RADAR satellite being proposed ERS-1. I also consulted on gold concessions in Burundi Africa and got offered a job to be Exploration Manager. We moved to Burundi for two great years. I got to define the external zone of the Kibaran Orogeny and demonstrated that the gold was syn-kinematic to thrusting. The first Gulf war froze assets in the Gulf and financing was out of Qatar so time to move on. I had not worked in the States in a long time so cruised around talking to various groups in exploration and academics. I got hired by Boston College Department of Geology and Geophysics to work at their new main frame GIS center. I also got cross appointed at the Boston University Center for Remote Sensing. A couple of fun years and then got tapped on the shoulder about a position opening up for the new global target selection team at Homestake Mining immediately after the Corona merger.

There were to be a group of 7 senior Geo's managing global exploration as a team, 3 from Corona, and 3 from Homestake with me from outside. They realized they needed more international exploration experience and Hi-Tech.

My first GSN meeting was shortly after I arrived in Reno and not knowing anyone just sat at a table only to find out everyone was ex Homestake. Ohhhh boy, but everyone was great.

I worked at Homestake until just before the Barrick merger and got to work on many deposits globally. What a great education, but it was now a market bottom and I was concerned about making a living. I did a lot of ore deposits and remote sensing consulting keeping very busy despite the market. In about 2003 Ron Parratt asked if I wanted to start a company with him. This was the formation of AuEx and we took it public in 2005 with about 10 projects including purchasing Pittston Nevada in exchange for shares in our company. Pittston discovered gold in the Pequops and included the land package that had Long Canyon. We took our IPO money and drilled West Pequop and Long Canyon. Significantly, we reinterpreted the geology at Long Canyon to be structurally controlled instead of stratabound and drilled significant high grade oxide.

We sold the company in 2010 and made a spinout called Renaissance Gold. Currently I am a director and Technical Advisor to RenGold, director of MagnaTerra who purchased our Argentine assets, Chairman of TerraCore that does hyperspectral core scanning, and of course our beloved GSN.



**February 2019 in Aruba with my GSN pack.**

**The island has historic gold mines and is cored by 80 Ma Cretaceous granites. You can't escape the stuff.**



**GSN WINNEMUCCA CHAPTER MEETING**

**WEDNESDAY, APRIL 17, 2019**

**Location: The MARTIN HOTEL, 94 Railroad St., Winnemucca, NV**

**Time: Appetizers & Drinks @ 6:00 p.m.; Talk begins @ 7:00 p.m.**

**Speaker: Wiley Skewes, Sr. Geologist, Equinox Gold**

**Title: “Dealing With Complexity: Geologic Modeling of the  
Castle Mountain Epithermal Deposit”  
(See abstract on page 14!)**

**Food and Drinks Sponsored by: To Be Announced**

**GSN ELKO CHAPTER MEETING**

**THURSDAY, APRIL 18, 2019**

**Location: The WESTERN FOLKLIFE CENTER, 501 Railroad St., Elko**

**Time: Appetizers & Drinks @ 6:00 p.m., Talk @ 7:00 p.m.**

**Speaker & Topic: To Be Announced**

**Food and Drinks Sponsored by:**

*National*

EXPLORATION • WELLS • PUMPS

# Reno Meeting Food Survey Results

Molly Hunsaker, Membership Chair

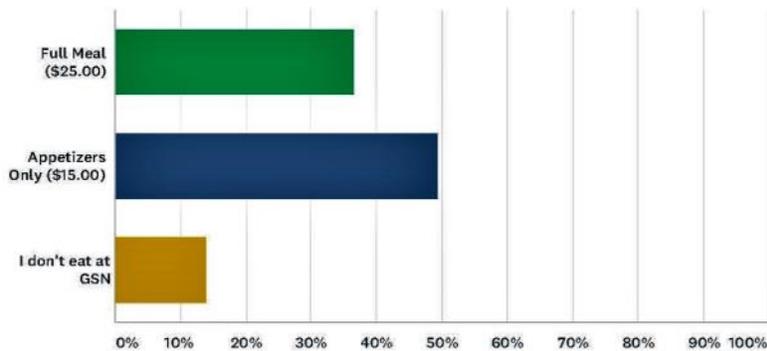
Thank you to all the GSN Members who took the survey about the Reno meeting! 158 people took the survey with 78 favoring appetizers, 58 favoring dinner, and 22 who don't eat. The Reno GSN meetings will be serving appetizers for food in place of dinner, the cost will be \$15.00. No RSVP is required for Reno GSN Meetings. Since it is appetizers, it is almost guaranteed we will run out of the "good stuff" first. Please remember **this isn't dinner** so please refrain from going back for seconds until everyone has eaten. Please leave some of the wings and other hot food for your friends, and get there first if you are picky. There was an abundance of positive feedback and suggestions on how to improve the meeting in the survey. We will be implementing some of those changes. Some members request another venue, or to go back to the Elks lodge. For the remainder of 2019 and 2020 we will be hosting meetings at the Taps and Tanks facility. Our meeting attendance since switching venues has gone up over 50%. We will continue having meetings on the third Friday as that is the best day for Taps and Tanks to accommodate us. We appreciate everyone who participated in the survey. For those who want to help make decisions regarding how GSN operates please considering volunteering for the Executive Committee (EC). The Executive Committee is part of the governing body of GSN. The EC is made up completely of volunteers who donate their time to serve GSN. If you would like to be on the EC please let Richard Bedell know. Please direct any comments toward EC members as Laura is not a voting member of the EC. Our emails are on the front page of the newsletter. Molly can be reached by phone at 775-340-0289 if you prefer to speak on the phone.

GSN Reno Meeting

SurveyMonkey

## Q1 Do you prefer a full meal or appetizers at GSN Meetings?

Answered: 158 Skipped: 0



ANSWER CHOICES	RESPONSES
Full Meal (\$25.00)	36.71% 58
Appetizers Only (\$15.00)	49.37% 78
I don't eat at GSN	13.92% 22
TOTAL	158

# Volunteers needed in Elko, Winnemucca & Las Vegas!

## It's time to Volunteer For, or Nominate Chapter Officers for 2019-20!

If you have been contemplating helping out your GSN organization by volunteering to be a Chapter Officer this is the time to step forward! Nominations for positions must be finalized at the April Chapter meetings and ballots will be sent out following so the winners can be announced in May.

To volunteer/nominate for Elko positions contact Nate Wright @ [nathan.wright@newmont.com](mailto:nathan.wright@newmont.com)

For the So. Nevada Chapter please contact Joshua Bonde @ [paleo@lvnhm.org](mailto:paleo@lvnhm.org) and

for the Winnemucca Chapter please contact Matt Fithian @ [matthew.fithian@ssrmining.com](mailto:matthew.fithian@ssrmining.com).

# GEOLOGICAL SOCIETY OF NEVADA 2019-2020 BALLOT

This Ballot will also be attached as a separate file to your email so you can submit online!

In accordance with Article V, Section 4 of the GSN Constitution and Article II of the GSN By-Laws, the GSN Executive Committee and the GSN Board of Directors are recommending the slate of candidates listed below to serve as Officers for 2019-2020 and Directors for 2019-2022; these positions become effective on June 1st.

The entire GSN membership has the right to vote separately on approving the elected positions to the GSN Executive Committee and the Class B three-year terms on the Board of Directors as presented below:

## Board of Directors Class B\* (three-year term, 1 June 2019 – 31 May 2022)

David Caldwell

Gregory French

FOR BOTH \_\_\_\_\_

AGAINST BOTH \_\_\_

## Officers/Executive Committee of GSN (one-year term, 1 June 2019 – 31 May 2020)

President:

Dennis Bryan

Vice President/President-Elect:

Mary Stollenwerk

Secretary:

Steve Weiss

Treasurer:

Robert Kastelic

Membership Co-Chairs:

Patricia Capistrant and Kelsey Sherrard

Publication Co-Chairs:

Ruth Carraher and Shannon Gill

FOR SLATE \_\_\_\_\_

AGAINST SLATE\_\_

\*\*\*\*\*

CURRENT GSN MEMBER'S NAME: \_\_\_\_\_

(All votes must include your name as a member in good standing for 2019. Ballots without a name will not be counted.)

If you are receiving this notice by mail, please either mail your vote to: GSN, 2175 Raggio Parkway, Reno, Nevada 89512 or fax it to (775) 323-3599. In order for the vote on this ballot to be counted the completed **ballot must be received in the GSN office on or before 11:59 pm on Friday, April 19, 2019.** Thank you for your participation.

\* Elected members of the Board of Directors serve three-year terms, which are renewable at the end of the term. Class A Directors (with terms ending May 31, 2021) are Bob Thomas and John Watson. The Class C Directors (with terms ending May 31, 2020) are Camille Prenn and David Shaddrick. Other members of the Board include the current GSN President, the GSN Immediate Past President, and current Presidents of the Elko, Southern Nevada, and Winnemucca Chapters. The Nominating Committee includes these latter five individuals and the Chair of the Board of Directors. (You can also vote by Survey Monkey)

# ***GSN SPRING FIELD TRIP!***

## **“Mining History and Some Geology”**

**June 1 & 2, 2019**

The Spring GSN field trip will be heading to the northern Mother Lode and beyond in Northern California. From Nevada City, up Highway 49, to the Malakoff Diggins and Alleghany, to Sierra Buttes and the Lakes Basin region, and then to Plumas Eureka State Park near Graeagle. The emphasis for the trip will be visiting historical mining operations from the 1800's and imagining what life must have been like back then. Along the way we will also be exposed to the exceptional geology of the region.

On our first day we'll travel west over Donner Summit to Nevada City and then north on Highway 49 to Alleghany and the historically famous 16 to 1 Mine. We will tour the museum and town of Alleghany and spend time underground in the 16 to 1. You will even have a chance to buy gold specimens that came from the mine. Alleghany, which many consider to be on the northernmost segment of the “Mother Lode”, was the most famous high-grade gold mining district in California. The value of total output is estimated at \$50 million (as of the dates of mining). Much of this gold came from small but spectacularly rich ore bodies, such as in the 16 to 1 Mine.

The next day our first stop will be the Malakoff Diggins and the associated mining town of North Bloomfield. The Malakoff Diggins preserves the largest hydraulic gold mining site in California. It first started in the early 1850's, after most of the active rivers and streams of the surrounding Sierra had been relieved of their accumulated gold nuggets. Higher and older river deposits with gold were found on the mountainsides but a way to “wash” out the gold had to be found, hence hydraulic mining was “invented”. This mining method was eventually outlawed in 1880's by the new State of California because of the very visible negative impacts this mining method had on downstream rivers and people. We will see and be encouraged to hike to the results of this massive mining operation that turned rolling, forested hills into badland-like sculptures that attract myriads of tourists today for its scenic beauty. We will also tour the adjacent town of North Bloomfield, with its numerous vintage buildings and businesses, where those miners lived and raised their families.

Then up Highway 49 to Goodyears Bar and Downieville, gold placer heaven back in the 1850's, and on to the Lakes Basin region where we will stop at Sardine Lake to take in the scenic beauty of the Sierra Buttes and marvel at how those miners in the 1800's, scrapped a living from those hard rock mines hanging on the side of the Mountain. We'll visit Sand Pond, a now popular swimming hole, and learn how it really came to be.

We will finally end up at Plumas Eureka State Park. Placer gold was first found in the area in 1850. In 1851 a rich gold ledge was found on the side of the mountain which eventually lead to the establishment of the Plumas Eureka Mine which produced, intermittently, up until the 1940's.

The inspiration for the field trip was GSN's previous Fall Field Trip way back in 2000, organized by David Shaddrick to some of the same areas, and my own (Dennis Bryan) experience many years ago in the Lakes Basin area. Thought I would take some parts of that 2000 field trip and add to the experience with some new stuff never before seen on any GSN field trip.

The field trip will be two days on a bus, Saturday and Sunday, June 1 -2, 2019. We'll stay overnight Saturday in Nevada City at the Northern Queen Inn, where we will also enjoy cocktails and dinner that evening. We will be back in Reno the next day, Sunday, around dinner time.

Bring your camera as this field trip features some of the most scenic geologic terrain and historic mining camps in Northern California. It will be the beginning of summer, the weather should be beautiful, but in some of the higher elevations there may still be snow hanging around after this exceptional winter we just went through.

This field trip is being organized by Dennis Bryan, occasional consultant, and Bob Pease, consultant, who has lived in Grass Valley for half a century.

**Registration will be available by April 15th. Email Laura at the GSN office to save a seat now! [gsn@gsnv.org](mailto:gsn@gsnv.org)**

# NEWS FROM THE FOUNDATION

By Cami Prenn, GSN Foundation Chair

I'm pretty certain that everyone is welcoming SPRING into their lives after a long and snowy winter! And we know that right behind spring comes field season and with that, UNR Field Camp and the GSN Foundation Field Camp Scholarships. That's right – we've taken applications and awarded scholarships to five applicants this year. That's a much smaller number of students than we had last year. This year's students going to Field Camp with our help are:

Marresa Bovee  
Jacob Ortega

Dustin Deitch  
Nicholas Romano

Sage Gandolfo

We've asked them to attend the April GSN Meeting to receive their scholarship checks and we hope to see them at future GSN meetings as they launch into their careers. We wish them an educational adventure and an enjoyable time at UNR Field Camp this summer!

The other programs the Foundation has funded this year are the K-12 Field Trip Grants, the NBMG Mapping Program, the UNR Scholarship, the UNLV Scholarship, the CREG Yerington Field Mapping Course, and contributed to the Elko Chapter's scholarship fund for graduate students' Nevada-based geology research projects.

I hope you appreciate the care with which the GSN Foundation Board is managing your donations and putting the money where it will help fuel our exploration industry into the future.

*Thank you to our generous donors in March*

## **G.S.N. FOUNDATION**

### **G.S.N. Student Field Camp Fund**

*(This fund awards scholarships to UNR students attending Summer Field Camp to help with tuition costs)*

**Tom Anderson**

### **G.S.N. Student Dinner Fund**

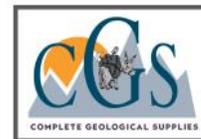
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## Activity Update

Mike Brady, FEBRUARY 2019

[www.activityupdate.com](http://www.activityupdate.com)

### NEVADA

Barrian Mining Corp. announced that it acquired an option to earn a 75% interest in the Bolo Property from Allegiant Gold Ltd. for \$1,000,000 in shares and \$4,000,000 in exploration expenditures over 3 years. *Press Release:* January 22

Kinross Gold Corp. announced that recent drill results at the Bald Mountain/Redbird Project include 131-139 meters @ 8.96 gpt Au (RB18-012); 258-340 meters @ 1.23 gpt Au (RB18-014); 219-262 meters @ 4.58 gpt Au (RB18-019) and 355-392 meters @ 1.70 gpt Au (RB18-037). (reserve @ Bald Mountain = 113,893,000 tonnes @ 0.70 gpt Au proven+probable) *Press Release:* February 13

Orla Mining Ltd. announced that it acquired an option to earn a 100% interest in the Monitor Property from Mountain Gold Claims LLC. for \$525,000 cash and \$755,000 in exploration expenditures over 10 years. *Press Release:* January 25

McEwen Mining Inc. announced that roughly 136,400 tonnes of ore have now been placed on the heap leach pad at the Gold Bar Mine and that gold production will follow shortly. Capital costs for project completion remain at \$81,400,000 to produce 55,000 ounces/year gold. (reserve = 11,900,000 tonnes @ 1.16 gpt Au proven+probable) *Press Release:* February 5

Coeur Mining Inc. announced that reserves at the Rochester Mine aggregate 219,600,000 tonnes @ 0.10 gpt Au, 15 gpt Ag proven+probable. (was 222,549,000 tonnes @ 0.1 gpt Au, 18 gpt Ag proven+probable) *Press Release:* February 20

Premier Gold Mines Ltd.(40%) announced that the Phase 1 open pit development of the South Arturo Mine as well as the El Nino underground project is now in progress with anticipated production for late 2019. The Phase 2 open pit was mined 2016-17 and is now complete. (reserve = 2,550,000 tonnes @ 2.98 gpt Au proven+probable open pit) *E/MJ:* January 2019

OceanaGold Corp. announced that it acquired an option to earn a 51% interest in the Fat Lizard Property from Renaissance Gold Inc. for \$225,000 cash and \$3,000,000 in exploration expenditures over 5 years. *Press Release:* February 20

S2 Resources Ltd. announced that recent drill results at the Ecu Project include 99.06-102.72 meters @ 1.65 gpt Au (NECD01). *Press Release:* February 14

Premier Gold Mines Ltd.(40%) announced that recent drill results at the South Arturo Project include 199.6-225.6 meters @ 5.84 gpt Au (BD18-05C); 243.8-265.2 meters @ 4.50 gpt Au (BD18-06C); 265.2-289.6 meters @ 2.85 gpt Au (BD18-07C) and 279.2-300.5 meters @ 6.52 gpt Au (BD18-08C). (reserve = 90,000 tonnes @ 9.7 gpt Au underground) *Press Release:* January 29

Gold Standard Ventures Corp. announced that recent drill results at the Railroad/Dark Star Project include 205.8-213.4 meters @ 2.43 gpt Au (DR18-108); 192.1-210.4 meters @ 0.34 gpt Au (DR18-113); 21.3-60.9 meters @ 0.38 gpt Au (DR18-114) and 22.9-32.0 meters @ 0.23 gpt Au (DR18-116). (resource = 15,380,000 tonnes @ 0.54 gpt Au measured+indicated) *Press Release:* February 5

Gold Standard Ventures Corp. announced that recent drill results at the Railroad/Dixie Project include 164.6-227.1 meters @ 0.38 gpt Au (DX18-08); 125.0-146.3 meters @ 0.40 gpt Au (DX18-09); 103.6-140.2 meters @ 0.49 gpt Au (DX18-10) and 112.8-135.7 meters @ 0.51 gpt Au (DX18-11). (resource = 29,463,000 tonnes @ 1.5 gpt Au inferred) *Press Release:* February 12

Gold Standard Ventures Corp. announced that recent drill results at the Railroad/Jasperoid Wash Project include 0.6-53.8 meters @ 0.31 gpt Au (JW18-29); 56.7-84.4 meters @ 0.86 gpt Au (JW18-30); 35.1-41.2 meters @ 0.33 gpt Au (JW18-32) and 64.0-100.6 meters @ 0.32 gpt Au (JW18-35). *Press Release:* February 21

Corvus Gold Inc. announced that recent drill results at the Mother Lode Project include 179.83-210.31 meters @ 1.30 gpt Au (ML18-089); 0-38.1 meters @ 2.58 gpt Au (ML18-090); 271.27-312.42 meters @ 1.02 gpt Au (ML18-099) and 281.94-298.7 meters @ 0.61 gpt Au (ML18-101). (resource = 13,226,000 tonnes @ 1.72 gpt Au measured+indicated) *Press Release:* February 21

International Silver Inc. announced that it acquired the Pioche District assets of Altair Resources Inc. for the settlement of a \$240,000 debt and 5,000,000 shares. *Press Release:* February 22

Barrick Gold Corp. announced that it offered to acquire Newmont Mining Corp. through an all share exchange (unstated) although Newmont would be required to cancel its acquisition of Goldcorp first. *Press Release:* February 26

# ROCK TALK

## CLAIM NAME GAME

Recently I made a pilgrimage to my family's ancestral home in the Okanogan country of north central Washington State. Upon review of the county claim notices from the year 1900-sure enough, I found location notices from my great grandfather-the 'Little Gladys' lode claim-still there for all to see well over one hundred years ago.

These claim names will be preserved for a long time for public inspection so why the recent lack of thought and creativity behind the assignment of claim names. Letters, numbers or combinations of the two seem to be the norm-where is the wit and soul?

This claim is the sum of all your aspirations, expectations and of course promotional potential. It tells the world (or at least the BLM and county) what you think of this 20 acre parcel of wealth and mineral endowment.

As claim staking professionals we need to continue the proud traditions of the past and incorporate hope, hype and hyperbole into our moniker making.

Some examples I have used or encountered throughout the years have characterized the high expectations we, the most optimistic of people, have used to name our claims-**Jumbo, Mammoth, World Beater, Hidden Treasure, Pride of the Mountains, Blue Ribbon, Lucky Strike, King's Ransom** and the **consolidated extensions** thereof.

The use of the precious metals is widespread and gold this and that is a little too common-I prefer the Spanish or Latin derivations-**Oro Plata, Sogni d' Oro** (dreams of gold), **Argentum Magnum**. Some other examples are **Golden Boulder, Silver Arrow, Yellowcake, Ruby Silver, and Silver Glance**.

Animals are always good ways of identifying your acreage and **Big Bear, War Eagle, June Bug or Boon Jug, Deer Trail, Ibx, Big Bug, and Sidewinder** have been favorites.

Booze seems to be a common theme as well and **Whiskey Hill, Beerforall, Last Call and Champagne River** are names honoring the drinks that inspired the claim staking.

Place names are always good and help to identify the claim staker's home, often far away such as **Woo Loo Moo Loo** (a slum district in Sydney, Australia) **Tittabawasee** (a river in Michigan), **Golconda** (the Indian Diamond district), and **Drumlummon** (Ireland parish)

Topographic features especially those characteristic to the area can be used to specify your property and Native American names can add a cultural aspect, such as **Big Chief, Great Spirit, Mohawk and Warrior**.

Names of family, wives, and loved ones are always popular and can easily be used to personalize the claim for posterity.

Desperation is unfortunately a theme as well as shown by **Last Chance, Hard Luck, Down and Out, Hardscrabble, Lost Hope, and Deep Enough**.

Some names are just interesting or whimsical such as **Quantum Sufficient, Damfino, Seven Devils, Stalin's Present, Sunny Tunnel, Neversweat, Lucky Knock, Dirty Pearl, First Thought, Sundrop, and Fallen Dollar**.

Ok, those are the old ones, let's use some contemporary themes or names from this point on-how about: **Sinter, Deep Feeder, Crustal Abundance, Battery Beater, Elon's Treasure, Big Thrust, Back Arc, Unobtainium, Allochthonous Prime, Oprah's Booty, Cynosure, and Effulgent**.

Letters and numbers are for addresses not claims, let's get creative.

**The Ol' Consultant**

## Abstract for Winnemucca Chapter Meeting, April 17, 2019

### "Dealing With Complexity: Geologic Modeling of the Castle Mountain Epithermal Deposit"

Wiley Skewes (Senior Geologist), Equinox Gold

Castle Mountain is a low-sulfidation epithermal gold deposit located on the margin of the Colorado River Extensional Corridor in the Mojave Desert of Southern California. Host rocks consist of basement schists and gneiss overlain by Peach Spring tuff, andesite flows and epiclastic sandy conglomerates of the Jacks Well Formation, and the rhyolitic flow-dome complex of the Linder Peak Formation. Post-mineralization rhyolitic to dacite units of the Hart Peak Formation cut the deposit while debris flows containing basalts of the Piute Springs Formation locally overlie the deposit along a distinct paleo-valley. Structures show dextral oblique normal motion on steeply-dipping 010-030 striking structures. Antithetic 070 striking accommodation structures are also recognized but are poorly constrained by vertical and sub-parallel drilling.

Gold mineralization at Castle Mountain is primarily hosted in the Linder Peak Formation, with feeder zones extending into underlying units. Primary mineralization textures show a single mineralization event with native gold contained in a late silica generation. Gold distribution generally forms low grade zones centered on structural corridors and damage zones within or around rhyolite stocks. However, lithologic variability accounts for significant variability in gold presence and grade, and interpretations of mineralization distribution are not simple.

To handle the complexities of the Castle Mountain deposit, the Equinox Gold geologic team followed a rigorous and iterative protocol for data collection based on geologic first principles and with an eye toward geologic and resource modeling. This approach provided the framework for successful geologic and resource modeling of the Castle Mountain deposit and can be used as a guide for comprehensive data collection and modeling for other projects.

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## OTHER UPCOMING EVENTS

**2 April 2019 Arizona Geological Society meeting, Speaker: Dan Johnson, VP & GM, Florence Copper Incl. Title: "Florence Copper: Copper Recovery Using In-situ Technology"** . 6 to 9 p.m. at the Sheraton, 5151 E Grant Rd. (& Rosemont), Tucson, AZ Click on the link for more info and online registration: More information and online registration: <https://www.arizonaageologicalsociety.org/event-3318379> . Dinner closes at 11 am Friday, March 29th .

**4 April 2019 Nevada Petroleum & Geothermal Society, Reno, NV monthly meeting. Cocktails at 6:30 PM, Dinner at 7:00 PM, Tamarack Junction, Reno NV 89512. Speaker: Vincent Ramirez will be giving a talk titled, "Western U.S. Obduction Tectonics with Seismic Examples of Deformation in California and Nevada". Please make reservations by Monday, April 1, 2019.** Click here for details or to register online and reserve your seat. <https://npgs.123signup.com/event/registration/hpkt?mid=5044444>

**9 April 2019 SME Northern Nevada Section Monthly Meeting.** Circus-Circus Mandalay Room, Reno NV. Speaker and Topic To Be Announced. Happy Hour @ 6 pm, Dinner @ 7 pm. Please contact Sarah Lightner for more information at 775-746-7146 or [NNevSME@gmail.com](mailto:NNevSME@gmail.com)

**11 April 2019 AEG Great Basin Section Monthly Meeting.** Sure Stay Plus Hotel by Best Western, 1981 Terminal Way, Reno NV. **Speaker: Wendy Calvin, PhD—Core Spectral Imaging.** Social Hour @ 5:30 pm, Dinner @ 6:30 pm, Presentation @ 7:00 pm. Please email Merrily Graham to RSVP at [mkgraham75@gmail.com](mailto:mkgraham75@gmail.com).

**15 April 2019 DREGS (Denver Region Exploration Geologists), Speaker: TBA. Title: TBA.** Social 6 p.m., Presentation 7 p.m. at Berthoud Hall, Room 241, CO School of Mines, Golden. For more info. contact James Piper at [geopros@g.com](mailto:geopros@g.com)

**14-17 September 2019 AIPG 56th National Conference. Geology in the Green Mountains: Scenic Beauty and Economic Engine.** Burlington, Vermont. Go to [www.aipg.org](http://www.aipg.org) for more information.

**7-10 October 2019 Society of Economic Geologists (SEG/Chile Explore Group) 2019 Conference: South American Metallogeny: Sierra to Craton;** Santiago, Chile; Website: [www.seg2019.org](http://www.seg2019.org)



**PETER HAMILTON  
HAHN MEMORIAL INFO  
Oct. 12, 1934 - Jan. 7, 2019**

**DATE: April 13, 2019**

**PLACE: East Ely Nevada  
Railroad Station**

**TIME: 11:00 am**

On your own for lunch then back to station for Steam Engine train ride that departs at 1:00 pm.

If interested, please call Eric for train tickets: 775-289-2085  
Per Peter's wishes, his ashes will be scattered from the train along the tracks in route.

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Please join the Women's Mining Coalition for the 27th Annual Fly-In to Washington D.C. on April 28 – May 2, 2019.

**Goals:**

- Raise awareness of WMC, its mission, and its members;
- Discuss issues of importance to the mining industry with members of Congress and their staff;
- Showcase how women benefit from working in and supporting a robust domestic mining industry; and
- Network with other women in all facets of the mining industry.

**Tentative Itinerary:**

Morning of Monday, April 29: Orientation and strategy briefing at National Mining Association  
Afternoon of Monday, April 29: Meetings on the Hill  
Tuesday, April 30 - Thursday, May 2: Meetings on the Hill

**How to Register as a Participant:**  
If you plan to attend, contact Lynne Volpi, WMC Coordinator, [lvolpi@frontiernet.net](mailto:lvolpi@frontiernet.net) no later than April 15, 2019.

**WE HOPE TO SEE YOU THERE!**

**The McCaw School of Mines  
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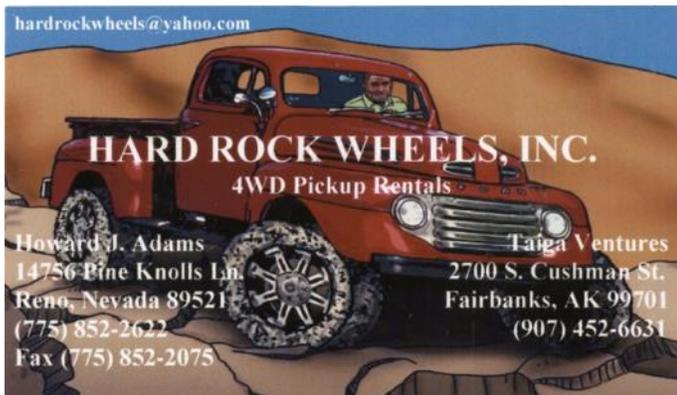
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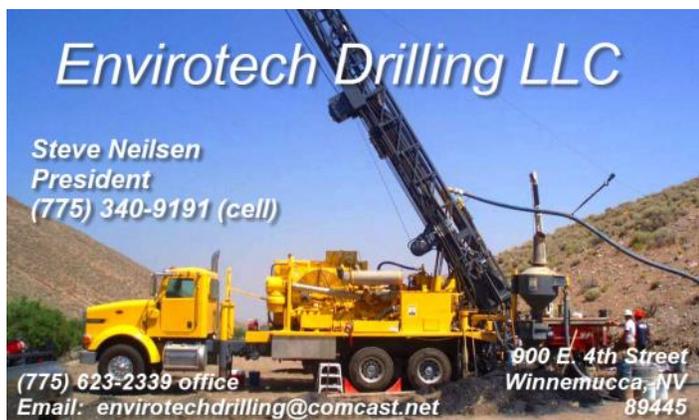
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(Please submit your backpack photos at any time!)



Bob Kastelic with his GSN backpack in Africa!



Night view of Toronto from Laura's 41st floor AirBnB condo during PDAC. Can you pick out the Convention Centre and the Intercontinental Hotel on the right?