



GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Room 107, Reno, NV 89512
(775) 323-3500 - Hours Tuesday -- Friday, 8 a.m. to 3 p.m. Monday by appointment.

Website: www.gsnv.org • E-mail: gsn@gsnv.org



August 2017, Vol. 33, No. 6

Published monthly except June and July

CALENDAR OF GSN EVENTS

PRESIDENT

Kelly Cluer
Kinross Gold
Kelly.cluer@kinross.com

VICE PRESIDENT

Richard Bedell
Renaissance Gold
rbedell@rengold.com

SECRETARY

Steven Weiss
Consultant, Geologist
siraweiss@outlook.com

TREASURER

Bob Kastelic
McEwen Mining
bob_kastelic@yahoo.com

MEMBERSHIP CHAIR

Molly Hunsaker
Hunsaker Inc.
mollymhunsaker@aol.com

PUBLICATION CHAIR

David Boden
Truckee Meadows Community College
dboden@tmcc.edu

EXECUTIVE MANAGER

Laura Ruud
Geological Society of Nevada
gsn@gsnv.org

GSN BOARD OF DIRECTORS

Chairman
John Watson

Current GSN President:
Kelly Cluer

Most Recent Past GSN President
Alan Coyner

Elko Chapter President
Mark Travis

So. Nevada Chapter President
Paul Dockweiler

Winnemucca Chapter President
Matthew Fithian

Class A, 2015-2018
Robert Thomas
John Watson—CHAIR

Class B, 2016-2019
David Caldwell
Greg French

Class C, 2017-2020
David Shaddrick
Camille Prenn

- Aug. 9, 2017 WEDNESDAY** **WINNEMUCCA CHAPTER SUMMER BBQ!**
The BBQ will be held at Highland Park, 4220 Water Canyon Road, Winnemucca, NV, 4:30 to 8:00 PM. **Food & Drinks Sponsored by: ALS Minerals & Boart Longyear.** For more information, please contact Matt Fithian at: MFithian@silverstandard.com. Details on page 7.
- Aug. 10, 2017 THURSDAY** **16TH ANNUAL "SILVER" SUMMER SERIES BBQ IN RENO**
Guest Speaker: Diane Garrett. Title: "First Mover or Fast Follower: Be driven by value and not the market". Location is at Dan Kappes's home, 13045 Welcome Way, Reno, NV. 6:00 PM Drinks, 6:30 PM Potluck BBQ, 7:30 PM talk begins. **Sponsors for the evening are Kappes, Cassidy & Associates, Mine Development Associates, CGS Mule and Hunsaker Inc.** BBQ meat and drinks will be provided. Please bring an appetizer, side dish, salad or dessert to share! Also bring your own lawn chair. Please RSVP by August 7th to Laura Ruud at the GSN Office, gsn@gsnv.org or 775-323-3500. Details on page 3.
- Aug. 17, 2017 THURSDAY** **ELKO CHAPTER SUMMER BBQ #3**
The Elko monthly BBQ will be held at the Duncan Little Creek Gallery Bar Backyard, 516 Commercial St. BBQ begins at 6:00 p.m. **Food & Drinks Sponsored by ALS Minerals and TerraCore.** For more info. Please contact Mark Travis, mark.william.travis@gmail.com. Details on page 7.
- Sept. 7, 2017 THURSDAY** **SO. NEVADA CHAPTER MEETING**
The monthly meeting will tentatively be held at the Las Vegas Natural History Museum at 900 N. Las Vegas Blvd. Pizza & beer at 5:30 pm, Talk at 6 pm. **Speaker and Topic: TBA.** Contact Paul Dockweiler for more information or if you would be willing to be a sponsor (\$250) or present a talk! paul.dockweiler@cardno.com.
- Sept. 22, 2017 FRIDAY** **NOTE CHANGE!! GSN MEMBERSHIP MEETING will be on the 4th Friday in September instead of the traditional 3rd Friday due to a conflict with the Elks Lodge.** The GSN meeting will be held at the Reno Elks Lodge, 597 Kumle Lane, Reno, Nevada. Social hour begins at 6 pm, Dinner at 7 pm and talk at 7:45 pm.
- Oct. 13-15, 2017** **SAVE THE DATES!**
GSN Fall Field Trip
GSN Fall 2017 field trip is well into the planning stages. The trip will head to Eureka, NV with plans to visit Alligator Ridge on Saturday and Emigrant Pass on Sunday. Registration form will be available soon. Details on page 9.

EAT BBQ

DRINK BEER!



G.S.N. "SILVER" SUMMER SERIES SPONSORS!



FROM THE PRESIDENT
Kelly Cluer, GSN President 2017-2018
AUGUST 2017

Dear GSN Members:

I want to take this inaugural message opportunity to thank everyone who helped me during the 2016-2017 Vice Presidency, especially Laura Ruud who helped get many tasks done under my self-inflicted tight deadlines. I am happy to thank Steve Weiss for taking on my Spring Field Trip duties and producing one of the better trips I've been on in a while. Alan Coyner gave me the decoder for the Elk's Lodge lighting controls - only a true friend would impart those deep secrets.

I also want to offer a heart-felt thank you to all the GSN members who have supported my grandson Sammy's battle with cancer these last couple of years - your generosity and kindness is truly overwhelming. Lastly I thank Kinross Gold U.S.A., Inc. for allowing me the time to participate in the GSN Executive Committee and all of their collateral support of the society over many years.



For this 60th!!! anniversary of GSN we are planning an interesting slate of talks for the dinner speaker season with several along the theme of "This Business of Exploration". To kick the idea off we have arranged for Diane Garrett, CEO of Wellgreen Platinum, and former CEO of Romarco Minerals, to speak at the 15th annual "Silver" Summer Series on August 10th, graciously hosted once again at the home of Dan Kappes (a hearty thank you Dan!). I think highlighting the business aspects of exploration could be a great way to further engage our student contingency, giving them some extracurricular technical exposure they may otherwise not encounter.

I am always interested in what the membership would like to hear and see at the monthly meetings, so if you have ideas for speakers/topics please send them along.

Looking forward to serving you this 2017-2018 season.

J. Kelly Cluer

The G.S.N. wishes to thank
NuLegacy Gold Corporation
for sponsoring the MAY 19, 2017 MEETING
SOCIAL HOUR in RENO!



GSN “SILVER” SUMMER SERIES BBQ—AUGUST 10, 2017

**16th Annual “Silver” Summer Series BBQ
With Guest Speaker: Diane Garrett, Ph.D.
President and CEO, Wellgreen Platinum Ltd.**

**Title: "First Mover or Fast Follower: Be driven by value
and not the market"**

Date: Thursday, August 10, 2017

Time: Drinks @ 6:00 pm, BBQ/Potluck Meal @ 6:30 pm, Talk @ 7:30 pm

Where: Dan Kappes’s Home, 13045 Welcome Way, Reno, Nevada

Things to Bring Along: A Side Dish, Salad or Dessert to share and a Lawn Chair!

Dan Kappes is buying the BBQ’d meat; Mine Development Associates is providing the beer kegs, CGS Mule is providing wine & soda and Hunsaker Inc. is providing water and ice!

DIRECTIONS TO DAN'S HOUSE (Please Carpool if you CAN!):

Take U.S. 395 to Damonte Ranch Exit. Head west on Arrow Creek Parkway, turn right (north) on Thomas Creek Rd. Turn right on Welcome Way at the 4-way stop sign. Dan's house is downhill from the corner, the first house on the left (except for the corner house) 13045 Welcome Way. Call if you get lost – Dan’s Cell phone is: 775-848-1981 and home phone: 775-622-1117.

"First Mover or Fast Follower: Be driven by value and not the market"

**Diane R. Garrett, Ph.D.
Wellgreen Platinum Ltd.
President and CEO**

Abstract:

The mining industry for the most part tends to be “followers” whether that be driven by geography, commodity or mining method. We will explore how Romarco Minerals became successful against the odds and in spite of negative market reaction when it ventured into South Carolina. This is a classic case study on why good projects are often overlooked or don’t receive the market value they deserve. From that discussion, we will explore the fundamental disconnect between what’s good mining practice and the demands by analysts and fund managers for value creation and how we as miners can bridge that gap.

“FACES OF GSN”

ANTHONY P. TAYLOR

A boyhood fascination with the adventures of Scott and Shackleton in the Antarctic in the early 1900's likely planted the word exploration in my head. In Captain Robert Scott's party were three geologists, the first I had heard about rock scientists.

Good fortune with teachers and mentors pointed the way to a career in metals exploration. Professor Sir Kingsley Dunham, one of England's most noted economic geologists mesmerized his audience in Saturday morning lectures at Durham University. I was fascinated by stories of exploration in Borneo from Bill Hancock, a doctoral student. My first exposure to industry was a two month spell in Anatolia and Gallipoli with the Turkish State Oil Company. Bashing limestones to release petroleum smells was rather hum drum. Oil Exploration was not for me. Towards the end of my final year, the legendary Dr. Owen Owens came to our petrology lab on a cold winter afternoon. In his new job as head of International Exploration for Cominco, the leading Canadian base metal producer, he was recruiting for new ventures in Europe, targeting massive Pb-Zn sulfide deposits. His thesis: go where the Romans went. They had come to England for lead and tin, not the climate.

On August 1, 1964, I became one of two first overseas employees with Cominco and set out to explore for new targets in the Northern Pennine ore field, an area of 525 sq miles. In two years we tramped upland moors collecting stream sediment samples, testing the -80# fraction with portable McPhar "colormetric" kits, giving us semi-quantitative lead-zinc values in the field. Many anomalies resulted, and one new district was eventually drilled. By then, I was in Ireland drumming up more anomalies. By the time they were drilled, I was in Mexico.

In August 1967, carrying \$US10,000 in cash from HQ in Montreal, I received a very warm welcome from my Mexican contact, prospector Ramon Oviedo, in Guadalajara. Cominco had learned of some exciting copper showings in the hot, mosquito ridden, Sierra Madre. Adjacent to a massive skarn we found outcropping porphyry copper mineralization, i.e. chalcopyrite/pyrite quartz stockworks exposed in stream beds. Mapping by pace and compass it was traced out and sampled. Work was delayed for 10 days to repair our big Dodge truck. Driving into the setting sun, I strayed off a gravel road with steep shoulders and overturned it with three of our loyal crew and all the camping gear in the back. Miraculously, no major injuries, but a close call. A few weeks after completing work in Jalisco I made another, near fatal, choice. Eating goat's meat from a street stall on Fiesta Day in a nearby village.

That job done, we set out on the long haul north to Zacatecas. Near Concepcion del Oro, and there camped on low hills in semi-desert and set about sampling a swarm of cinnabar veins in calcareous sediments. After a few days I began to feel weak, unable to keep food down and lost my taste of local medicine-tequila. By the time I staggered into Montreal office, I was barely able to carry bags with precious samples. After one glance at bright yellow eyes, my boss, Geoff Harden, bundled me in his car off to the airport to a hastily arranged seat on Air Canada overnight to London. Back at Marian's parents home in Northumberland it was straight to hospital by command of mother-in-law. Fortunately, I was able to make a complete recovery from that strain of hepatitis. But I was laid out for 4 months and worse, no beer for 15 months, a particularly daunting prospect on learning that we were to be transported to Australia.



According to Canadian HQ, we were destined for Townsville, Queensland-target laterite Ni. Living by the seaside in the subtropics sounded to good to be true. Indeed it was. Reporting for duty to Cominco's office in Adelaide, I was ordered to the desert outback in Western Australia. Target, greenstone ultramafic sulfide nickel deposits, a la Kambalda, the hot new discovery by Western Mining near Kalgoorlie.

My boss, Les Nixon, a veteran Gurkha Captain who survived Burma campaign, believed in primitive field living. With an ancient, very battered Landrover, a tiny aluminum bullet trailer, a crippled, alcoholic offsider, and temporary reserve 60 miles long and 35 miles wide to map and sample I struck out with great excitement for my first drilling job. (cont. on pg 5)

(Taylor, cont. from pg. 4)

Collar locations were sent over the flying doctor radio, but did not fit designated targets per map. But wait, I was not in the army, and the drill was collared to test what I could see on the ground. First disobedience of orders from HQ. The surface Ni rich ironstone targets, thought then to be gossans, were laterite caps after dunite with 2000 ppm Ni derived from magnesian olivine, not sulfides. Neither superiors or the Pommie newcomer had a clue. After 10 week stints away from Adelaide where Marian, pregnant with Joanne, lived by herself, with a boss enriching himself with stock of small listed companies doing business with Cominco and uncertainty of our next move, it was time to jump ship.



On my way back to work in WA after the Chrissie break, to who knows where, I called in to see Bill Hancock my old student mentor, now living in Kalgoorlie and working for a London based company, Selection Trust. A pioneer evaluation of the Yilgarn block by a remarkable Precambrian geologist from Selco, Canada, mapping out felsic centers for VMS deposits, had guided leasing of large tracts of greenstone. They also contain ultramafic complexes and in the wake of the Kambalda discovery, Selection Trust, guided by the famous Canadian geologist, Bruce Wilson, decided to add nickel to their copper-zinc portfolio. Selection Trust, founded by a famous American mining engineer, Sir Alfred Chester Beatty, were staffing up for a huge program for which they formed their own drilling division.

Thus began an altogether rewarding career with first posting on Block 48, adjacent to Kambalda. Then to Spargoville where six core rigs were drilling out several nickel sulfide ore shoots. One destined to become a high grade underground mine. Another sulfide "shoot", Spargoville 1A, was a geological gordian knot. High grade but, even after I managed to unravel some it, still proved too small to develop. The host ultramafic unit had pristine mafic and metallic minerals, one of the few in the Yilgarn that survived complete serpentinization. After three years, came the inevitable slowdown that follows a boom. It was time to move on-again. I asked ST if they would support a doctoral study on the olivine, chromite, ilmenite and primary magmatic sulfides. That, to add to understanding the origins of primary sulfide nickel sulfide deposits. They were willing to do so.

Back in the UK I was able to nail down primary mineral chemistry with the aid of a brand new microprobe at Manchester University, under the guidance of a world renowned ultramafic geologist. Two years was all I had and, somehow (lots of hours), completed a thesis by the time ST came calling. Forget about returning to Australia, they said, we want nickel experience for another fledgling program in the Archean greenstones of eastern South Africa. With, by then, two daughters, we embarked for the Eastern Transvaal and the gold mining town of Barberton and its remarkable preserved formations.

After almost a year exploring a sulfide poor ultramafic complex, promotion to a management came out of the blue along with many headaches inherent in that type of job. Inheriting a mixed team of South African and English geologists with a large contingent of tribal assistants, we had privileged access to several homelands in the Eastern Transvaal otherwise off limits to white South Africans. I quickly learned that white, let alone black, tribes were not necessarily very friendly to each other.

On weekends, I commuted to the town of Brits to tackle a Pt-Pd target in the Brits graben along southern margin of the Bushveld igneous complex. Mapping chromite traces in Afrikaans farmers fields, a rough strike of the UG 2 reef was established. The first of 10 core holes struck pay dirt and proceeded to outlined a new section of the 1-2 m chromite seam and PGM's assaying about 7 g/t. Disappointingly, the concessions was dropped by ST-there being no viable metallurgical treatment in sight. Later, the discovery became the Krokodile River Mine, owned in time by Gencor and one of the prolific UG 2, PGM sources superseding the more famous Merensky Reef. Back in the Eastern Transvaal, my team scored another first hole jackpot. Drilling an isolated, multi channel, ground conductor, massive malachite bearing gossan gave way with depth to very rich copper-zinc (27% Zn) massive sulfides. Disappointingly, it turned out to be only about 1mt size and deemed to small for BP who inherited it. Eventually it became a small producer in one of the post-apartheid independent homelands.

With dismay at the political climate in South Africa, ST decided to wind down exploration there and it was time to move-again. With the good fortune of a job offer from Amselco, we arrived in Reno on April 1,1978. By early summer, Ely, and the new discovery at Alligator Ridge, became my stamping ground to start work with great bunch of young (cont. on pg. 6)

(Taylor, cont. from pg. 5)

geos, many of whom are GSN stalwarts. ST's exploration successes around the world, including Alligator, came home to roost two years later. A pioneer exploration company swallowed whole by BP in a record transaction on the LSE at double its share price.

Under the umbrella of the mighty, bureaucratic, cash stuffed BP, Amselco greatly expanded to become the largest exploration group within BP Minerals. With a marvelous staff of approximately 150, scattered around the USA in 11 offices, we did our best to spend the bounty wisely. From Michigan UP (diamonds) in the north, to Phoenix (gold) in the south. From Carolina (gold) in the east, to California, Nevada and Montana in the west (gold, base metals). Two discoveries went to production; Ridgeway in South Carolina and Colosseum in California, both gold deposits. Amselco then acquired Greens Creek in SE Alaska, one of the highest grade volcanogenic massive Ag-Au-Pb-Zn sulfide deposits in the world. Thereafter, we instituted a new regional program based in Juneau. That became the first casualty of our "merger" with Kennecott. As predicted, the different cultures did not mix well and a slow and painful blood letting ensued.

By 1990, after the sale of BP Minerals to RTZ, I was persona non grata. A week after a classic Monday morning chop, courtesy of my old mentor Bill Hancock, I was in London meeting with Gencor. They wanted to build a gold exploration program in the western USA. Under the guise of Great Basin Exploration and Mining we built a portfolio along the nascent Battle Mtn -Eureka Trend. Regrettably, Gencor withdrew after 4 years to avoid entanglement in the asbestos imbroglio. One of their subsidiaries had been major suppliers to the USA.

Our small team bought the GBEM assets for \$1 and I rushed off to Toronto to raise money. The timing was bad and I had few connections with the junior financial community then. Fischer Watt Gold came calling and we sold off for a decent chunk of equity. Raising \$5m, ostensibly to explore the Nevada assets, FWG proceeded to blow most of it at its gold operation, El Limon, in Antioquia Province, Colombia. The mine lay in guerrilla territory and visiting that neck of the woods proved decidedly hazardous, and, despite a very rich metal endowment, an uncomfortable place to explore.

Once more on to new pastures and a fledgling Canadian junior, First Point in 1996. Their main property lay in Honduras, next to the Nicaraguan border. There, I narrowly escaped falling off a 40 foot cliff in thick bush while treading, lightly, only on outcrops. The daily round of land mine demolition nearby was constant reminder that perhaps the disposal teams hadn't located them all. Encountering the odd unexploded shell and shallow graves was not reassuring.

Time to return to Nevada and a another start up, Millennium Mining Company, in 1998. After optioning some very juicy epithermal properties from Jerry Baughman, another stroke of luck came my way after meeting up with an old friend, Ed Thompson, a well known Canadian. His contacts led to a clean TSX shell, Gold Summit, and a decent chunk of money raised. After some success drilling two epithermal systems, GSM turned full attention to the old Gilbert district, renamed Monte Cristo. Drilling the first angle core holes under the old open pit, bonanza grades for both Au and Ag were intersected. The prospect was subsequently bought by Hecla Mining Company.



My greatest good fortune was election to the board of Hecla, America's oldest mining company, in 2005. Reaching mandatory retirement age this May, my 15 years as a director of an operating company was certainly a crowning experience for an exploration geo. Travails in Venezuela, acquisition of the remaining 70% interest in Greens Creek, survival in an economic downturn, acquisition of Casa Berardi, completion of the Lucky Friday 4 shaft at the 8620 level, now the deepest operating in the USA, and renewal of mining at San Sebastian in Durango are notable experiences. Topping it off came participation in the closing bell ceremony at the NYSE, October 2016, to celebrate Hecla's 125 birthday. I will miss participation with such a talented group. They are hard at work introducing automation to many aspects of underground operations. There is a family feel there-so much reminiscent of Selection Trust. Two great companies.

Selex is the latest adventure, a privately held Ontario corporation, based in Reno. Our strategy: staking of high quality prospects a long time known to the founders. As we all know, in the last few years and now, exploration dollars are hard to raise. No doubt that will turn around and we will continue to explore and more discoveries made. I am proud to be part of the generally unpopular business that produces vital raw materials and jobs-a contribution to society's well being.

GSN WINNEMUCCA CHAPTER SUMMER BBQ



WEDNESDAY, AUGUST 9, 2017

4:30 p.m.—8:00 p.m.

Come meet your 2017-2018 officers and get reacquainted with old friends!

**Location: Highland Park
4220 Water Canyon Road
Winnemucca, Nevada**

Food and Drinks Sponsored by:



GSN ELKO CHAPTER SUMMER BBQ #3

(last one before we go back to our regular meetings at the Western Folklife Center)

THURSDAY, AUGUST 17, 2017

6:00 p.m.—9:00 p.m.

**Location: Duncan Little Creek Gallery Bar (Backyard)
516 Commercial Street
Elko, Nevada**

Food and Drinks Sponsored by:





SAVE THE DATES!

GSN FALL FIELD TRIP—OCTOBER 13-15, 2017!!



Richard Bedell

The Fall GSN Field Trip is on the Shallow Expression of Carlin Systems and will visit Alligator Ridge and Emigrant Deposits as well as some more regional outcrops. This will all be done on a bus leaving Reno just after lunch on October 13th and going to Eureka, Nevada for lecture and dinner. Saturday will be Alligator Ridge with some additional outcrops and back to Eureka for lecture and dinner. Sunday will be going north to Emigrant Deposit followed by outcrops at Emigrant Pass before heading back to Reno arriving early evening October 15th.

Mike Ressel is a co-leader. Craig Mach and Robert Morrell are taking us through Alligator Ridge (thank you Kinross) and Jim Essman is taking us through Emigrant (thank you Newmont). A registration form will be in the Sept. issue.

G.S.N. SPRING 2017 FIELD TRIP WRAP-UP

Steve Weiss

There was never a dull moment during the 2017 Spring Fieldtrip to Silver City, Nevada, as the epic wet winter spilled over into springtime in the Virginia Range. Moderate rain the first afternoon cut the visit to the historic Dayton mine a bit short, and soon it was a deluge and retreat to shelter in Virginia City, and dinner at the Gold Hill Hotel. Muddy roads the second morning got us all out of the vans and walking to most of the stops, allowing participants to experience the geology as the sun came out over freshly cleansed outcrops and road cuts. Adding to the enjoyment was the opportunity to visit with Art and Irma Wilson during the lunch stops, a chance for everyone to get a sense of Art's experiences growing up around the mines in Silver City. Thanks to Art for access to his property, and to all the trip sponsors!

Boart Longyear, Pershing Gold, ALS Minerals, American Assay Labs, Kinross Gold!!



Thank you to our generous sponsor for the So. Nevada Chapter meeting in MAY



Thank you to our generous sponsor for the Elko Chapter meeting in MAY



Thank you to our generous sponsor for the Winnemucca Chapter meeting in MAY



Thank you to our generous sponsors for the Elko Chapter JUNE & JULY SUMMER BBQS

JUNE BBQ



JULY BBQ



G.S.N. Board of Directors Picnic Wrap-Up Elizabeth Zbinden

It's called the Board of Directors Picnic but it is actually a picnic for all GSN members and their families. We gathered on Friday, June 23rd at Rancho San Rafael Park in Reno for food, fellowship, and frolic. Thanks to a blessedly wet winter the park was nice and green, with flowing streams, even though the heat wave was fierce. Attendees ranged from a few weeks to a few decades in life experience!

Frolic included a Gold Pan Toss competition, with a kids division and an adult division. Winners in the **kids division** were **Rose Barber-Callicrate, Ethan Johnson and Owen Johnson**. Winners in the **adult division** were **Sergey Konyshv, Elliott Crist, and Forrest Johnson**. Many thanks to **Neil Prens** for providing enviable quartz crystals as prizes for the adults.

So how does the Board of Directors come into it? They hosted the event. Once in a while we give a break to our many faithful company sponsors who pay for GSN events (thank you sponsors, all of you, for funding so many *other* things over the course of the year). At this event it is the Board members as individuals who buy and prepare the food and take the lead on set-up and clean-up. Chefs Greg French, Bob Thomas, Dave Caldwell, Cami Prens, Dave Shaddrick and John Watson chopped, mixed, grilled, and served. Thanks to the many other members who helped out with preparations and clean-up, including Molly Hunsaker for tasty home-baked desserts. And, well, there was one company sponsor for the picnic: thank you to **Mine Development Associates** for donating kegs of Great Basin Brewing Company beer.





GSN 2017 GOLF TOURNAMENT WRAP-UP

Elizabeth Zbinden



Fifty-Two golfers braved a Nevada heat wave on Saturday, June 17 at the Washoe County Golf Course for GSN's 2017 Golf Tournament. Thank you to **George Burke** and **American Assay Laboratories** for making it all happen as Title Sponsor this year. **American Assay staff** who voluntarily donated their Saturday included **Tanya, Jennifer, Catherine, Cesar, Josh, Salt, Tom, and Frank**. They set up, cleaned up, and served cold drinks and snacks to players. **Thank you!**

Bragging rights for the players go to the **Last Place team: Patty Capistrant, Rob Selwood, Brooke Mills, and Molly Hunsaker**. Three out of the four team members repeated their accomplishment, as they were on the last place team in 2016. At the other end of the list – the top! – is the **First Place team: Ken Cunningham, Gary Poland, Sarah Lightner, and Dave Shaddrick**. Dave was on the last place team in 2016, and the first place team in 2017 – how does that work?? Close behind was the **Second Place team: Cody Unger, CJ Larsen, Tony Moore, and Kurt Tresham**. Rounding out the winners list was the **Third Place team: Paul Muto, Ruth Carraher, Cheryl Lukens, and John Lukens**.

There were also prizes in individual categories. Winners of the **Longest Drive** (Women's and Men's) were: **Jennifer Arisman** and **Cody Unger**. Winners of **Closest to the Pin** (Women's and Men's) were: **Kristi Schaff** and **John Key**.

Sales of raffle tickets and mulligans raised funds for the GSN Foundation. The graphic on the next page shows the numerous generous sponsors who donated raffle prizes. **Thank you!** to the **raffle prize donors**, to **Mine Development Associates** for Great Basin Brewing Company keg beer, and once again to **American Assay Labs** for Title Sponsorship. Donors and sponsors enabled a lot of fun and another round of good projects by the GSN Foundation! (Photos by Laura Ruud)





The Geological Society of Nevada

Wishes to thank our generous raffle prize donors:



**MINE DEVELOPMENT
ASSOCIATES**



Partners on the Ground



Thank You, Thank You, Thank You, Thank You!

And the GSN wishes to specially thank
AMERICAN ASSAY LABORATORIES
for being the Title Sponsor of the
G.S.N.'s 2017 Golf Tournament!



Wrap-up of the Reno Aces Night - July 14, 2017



Thanks to **National EWP** for sponsoring another fun GSN event at the Reno Aces ball game on July 14th. Everyone had a great time despite the team's loss to the El Paso Chihuahuas.

James Stephens and Brian Johnson were wonderful hosts. One of the highlights of the evening was seeing James's son, Dallas, on the big screen saying "Play Ball!" to open the game. (That's him on the jumbotron in the top photo, above the ump's and wearing a red shirt) GSN Member, Kevin Kunkel appeared on the big screen also to play a game with the announcer. **Thank you again to CEO, Jeff Morgan and National EWP!**



NEWS FROM THE GSN FOUNDATION

Cami Prenn, Chair

Don't you hate it when you realize there's less summer to go than you've already enjoyed? Where did it go? No doubt, a good deal of time was spent in the field and for those 11 UNR students that went to Field Camp with a GSN Foundation scholarship, it was likely their first dose of field life in Nevada. One other program the Foundation supported last spring was the Field Mapping course in Yerington taught by John Muntean as part of the CREG program. When you see students at the GSN meetings this fall, be sure to ask them if they participated in either of these programs and how they enjoyed it.

The GSN golf tournament provides the opportunity for the Foundation to raise money by selling Mulligans and raffle tickets for prizes that are donated by generous sponsors. We raised almost \$2,000 this year which will help fund our programs again. Thank you to all the sponsors and golfers for helping us with that!

Two years ago the Foundation made a donation to the Keck Museum to purchase software to catalog the extensive collection. Garrett Barmore, Curator of the Museum, gave the Foundation Board members a tour of the museum in May, which included a look at the Stanford Ore Collection, housed in its own room in the Scrugham building where some of the NBMG offices are located. Several years ago the Foundation paid for a student to catalog that collection when it arrived at UNR so that piece of the Museum is taken care of and is available for use. It is quite wide-ranging!

Your donations make a positive impact on our industry! We can't thank you enough!

Thank you to our generous donors in MAY, JUNE & JULY!

G.S.N. FOUNDATION

GOLD DONORS \$500-\$999

SILVER DONORS \$100-\$499

BRONZE DONORS \$1-\$99

**Al Kirkham
David Ogan**

G.S.N. Student Field Trip Fund

**Frank Noland
David Ogan
Sandra Wyld**

ROCK TALK

STEM Inspiration at GSN-sponsored UNR Field Trip, by Laura Ellis

Many people ask, “So, why did you switch from Mining to Teaching?” My canned response is that, “Teaching makes so much sense for my family situation.” And, “I’ve always wanted to be a teacher.” While those things remain true, the reason that speaks to my core was solidified for me on our fieldtrip to the UNR Science and Engineering facilities, which would not have been possible without our GSN and Redfield communities’ support. On May 8, 9, and 10th, our scholars from Dilworth STEM Academy visited the Keck Mineral Museum, The Natural History Museum, the DeLaMare Engineering Library, the Fleishmann Planetarium, and some even got to experience their first tour of a college campus. Most of our students were blown away, and *this* is what makes my career switch so extremely rewarding. Dilworth STEM Academy is a Title 1 school, located in an underprivileged neighborhood in Sparks, NV. Many of them have never been to a college campus, let alone have they seen any sort of enriching scientific museum, such as those we visited.

The students in my particular group started out at the Natural History Museum, and were amazed at the specimens, and diverse biological record that was represented in their collection. Our students got to touch a bat! How cool is that? The look on their faces was a priceless combination of disgust, wonder, excitement, and “it is going to come back to life and bite me?” They got to experience a multitude of skeletons of local mammals, and learn how plant and animal remains are collected, kept, and preserved for study. And most importantly, the students were shown why Scientists are interested in understanding our natural world around them. Hearing the engaging questions, seeing their eyes light up, and experiencing 8th graders set aside their “teenage dramas” for a few hours to really focus on Science was a day that we all will cherish hopefully for years to come.

After the Natural History Museum, my group headed to the W.M. Keck Mineral Museum and got to tour first-hand the gorgeous mineral and rock specimens. Many students found the fossils the most exciting and interesting, while learning that our great state of Nevada does indeed have a state fossil, the Ichthyosaur, thus also planting the seed for a hopeful potential field trip in the future to Berlin-Ichthyosaur State Park.

Many of my students also looked with wonder at the different crystal shapes and amazing mineral specimens. Most of them had never seen any sort of impressive mineral collection previously, and were genuinely excited to see such beautiful and diverse examples of earth science at its finest. Earlier in the school year, we learned about the periodic table and chemical reactions, and it was very cool to see the students make connections with the chemical formulas to the mineral types, with respect to the elements involved. The Keck Museum was also a powerful place for our students to experience a piece of Nevada’s rich mining history. Many Dilworth students have not learned the details of Nevada’s mining history and do not realize the importance of mining on our state economy. The gorgeous collection of John Mackay’s historic custom Tiffany’s-made silver pieces and mining artifacts were a hot topic among many students. Some of the historic engineering and blasting gear inspired conversations with students recognizing that there are wonderful careers in mining that they may aspire to.

The last stop for my group on our museum tour was the DeLaMare Engineering Library, a prime example of STEM education in action. Students got to witness the 3D printer, the huge screen Google Earth interactive map, the virtual reality video game console, and a multitude of engineering applications. The students had a great time exploring hands-on engineering activities, making this stop a great culmination to our day.

Again, I have to thank our generous sponsors at GSN, and the Redfield Foundation, for making this day possible. The rewards for our students are directly aligned to our vision as a STEM education facility, hoping to inspire our students and expose them to as many scientific fields and careers as possible. Dilworth STEM Academy is extremely lucky to have had this field trip experience!



Students pass around a jawbone of a small mammal and gather around the butterfly collection at the Natural History Museum.



A student getting to touch the bat specimen.



Laura Ellis—GSN Member, Geologist, and Middle School Science Teacher



A student completes an engineering experiment by creating her own electrical circuits.



A student tries out the virtual reality video game.

ROCK TALK



**Women's Mining Coalition
25th Annual Fly-In to Washington D.C.
April 30 – May 4, 2017**

43 participants
3 ½ days of meetings
58 Senate meetings (63% of total Senate offices targeted)
151 House meetings (74% of total House offices targeted)
209 face-to-face meetings
88 emails to non-visited offices, including digital issue papers
Grand Total: 297 Congressional and Senate Contacts
21 meetings with actual Senators and Congressmen
23 meetings with Legislative Directors
5 meetings with Chiefs of Staff or Deputy Chiefs of Staff
17 meetings with Senior Policy Advisors
9 meetings with Legislative Counsels
1 meetings with regulatory agency (DOI - BLM)

WMC 2017 Fly-In issues focused on both hardrock and coal. Fly-In participants advocated that EPA's Final CERCLA § 108(b) Rule should establish there is no justification for a CERCLA § 108(b) financial assurance program because state and federal bonding programs eliminate the need for EPA's involvement.

Participants also communicated to Hill staffers that BLM's and US Forest Service's 2015 sage grouse land use plan amendments create unworkable and burdensome land use restrictions and prohibitions; that the amended LUPAs must comply with Secretarial Order 3349 and new Executive Orders; and that Congress should provide funds for the agencies to prepare the supplemental EIS per the court's remand order and create a strong record that the LUPA land use restrictions and mineral withdrawals are not necessary to protect the greater sage grouse.

During meetings on the Hill, participants endorsed the Administration's "All of the Above" energy policy and the continued use of coal. They also urged Congressional support for coal technology advancement, including robust DOE Fossil Energy R&D funding, and expanding 45Q tax credits for Carbon Capture and Storage.

Participants called for continued efforts by the Interior Department and Congress to facilitate coal and minerals development, including streamlining the permitting and the National Environmental Policy Act (NEPA) processes. They communicated that WMC also supports appropriate streamlining of federal agencies, including the Mine Safety and Health Administration and OSM which continue to garner a disproportionately high level of funding despite coal mines and coal employment decreasing by more than 40% over the past 5 years.

WMC would like to thank the sponsors, the participants, and the companies that sent their employees to the 2017 Fly-In. Without continued support from such WMC friends and partners, the annual Fly-In would not be possible.

Activity Update

Mike Brady, June 2017

www.activityupdate.com

NEVADA

New Range Gold Corp. announced that recent drill results at the Pamlico Project include 42.7-64.0 meters @ 1.27 gpt Au (P17-02); 7.6-16.8 meters @ 1.89 gpt Au (P17-04); 30.5-51.8 meters @ 13.67 gpt Au (P17-08) and 16.8-50.3 meters @ 1.10 gpt Au (P17-09). *Press Release:* June 19

ML Gold Corp. announced that recent drill results at the Palmetto Project include 221-224 meters @ 0.23 gpt Au (PAL17R03); 167.6-192.0 meters @ 0.54 gpt Au (PAL17R04) and 91.4-120.4 meters @ 0.25 gpt Au (PAL17R05). *Press Release:* June 15

Great Western Mining Corp. plc. announced that based on recent studies at the M2 Project, resources aggregate 3,914,700 tonnes @ 0.52% Cu indicated and 13,074,800 tonnes @ 0.52% Cu inferred. (no previous estimate) *Press Release:* June 12

Ramelius Resources Ltd. announced that it acquired an option to earn a 75% interest in the Jupiter Property from Renaissance Gold Inc. for \$25,000 cash and \$3,000,000 in exploration expenditures over 5 years. *Press Release:* June 21

Klondex Mines Ltd. announced that based on recent drill results at the Hollister Project resources aggregate 389,600 tonnes @ 16.6 gpt Au, 86.9 gpt Ag measured+indicated and 160,000 tonnes @ 14.4 gpt Au, 92.9 gpt Ag inferred. (reserve was = 952,700 tonnes @ 27 gpt Au, 162.1 gpt Ag proven+probable) *Press Release:* June 21

Roughrider Exploration Ltd. announced that it acquired an option to earn a 100% interest in the Iron Butte Property from private interests for \$1,000,000 cash and 1,500,000 shares over 6 years. (resource = 19,254,000 tonnes @ 0.48 gpt Au inferred) *Press Release:* June 22

Renaissance Gold Inc. announced that it acquired Kinetic Gold Corp. for 6,832,900 shares. *Press Release:* May 29

Gold Resource Corp. announced that recent drill results at the Gold Mesa Project include 10.67-16.77 meters @ 2.09 gpt Au (GMA-121); 10.67-15.24 meters @ 0.97 gpt Au (GMA-122); 13.72-18.29 meters @ 1.08 gpt Au (GMA-127) and 10.67-16.77 meters @ 1.20 gpt Au (GMA-132). *Press Release:* June 22

Anova Metals Ltd. and Exterra Resources Ltd. announced that they would merge on a 1.0 share Anova/2.0 shares Exterra exchange basis. (resource @ Big Springs = 5,403,000 tonnes @ 2.5 gpt Au measured+indicated) *Press Release:* June 8

NuLegacy Gold Corp. announced that recent drill results at the Red Hill Project include 79.3-83.8 meters @ 0.60 gpt Au (IS17-01); 106.4-126.9 meters @ 0.34 gpt Au (IC17-01C); 41.2-50.3 meters @ 0.22 gpt Au (IC17-02) and 115.9-140.2 meters @ 0.35 gpt Au (ID17-01). *Press Release:* June 20

NEW G.S.N. SPRING 2017 FIELD TRIP GUIDEBOOK AVAILABLE FOR PURCHASE!!

G.S.N. Special Publication #63

Get your copy of GSN's newest field trip guidebook published in conjunction with the May 2017 field trip titled **"Highlights of the Silver City Lode and Subsidiary Epithermal Gold-Silver Veins in the Silver City District, Lyon County, Nevada.** Cost is \$30 plus \$9 shipping in the U.S. The GSN bookstore website is:

<https://gsnv.org/publications/>

to order online and see all of the other great field trip guides and Symposium Proceedings volumes that the GSN has for sale! Please contact Laura Ruud with questions. gsn@gsnv.org or 775-323-3500.



Donald L. Gustafson

July 8, 1938 - May 24, 2017

Donald L. Gustafson, age 78, passed away on May 24, 2017, in Reno, Nevada, at St Mary's Medical Center surrounded by his loving family. He was born on July 8, 1938, in Princeton, Illinois, to Floyd and Marjorie Gustafson. He lived in Walnut, Illinois, until he left for college in 1956. During high school, he enjoyed being class president and the captain of the football team his senior year and was always active in sports. While in high school, he met the love of his life, Marilyn Gallentine. After dating through high school and college, they were married on June 26, 1960, in Walnut. Don graduated from the University of Colorado in Boulder in 1963 with a bachelor's degree and in 1965 with a master's degree in geology. While in Colorado their daughter, Dawn, was born.

Don's first job took him and his family to Reno, Nevada, where he worked for the Anaconda Copper Company. While in Reno, their daughter, Kimberley, was born. They moved to Yerington, Nevada, in 1966 for Don to work at the Yerington Copper Mine as a geologist. In 1971, the family moved to Butte, Montana, with Anaconda and Don worked in the underground mines and the Berkeley Pit. Four years later, Don changed jobs and went to work for Homestake Mining Company in Reno, Nevada, and started working in gold. After exploring for gold for seven years, Don was instrumental in the discovery of the McLaughlin Gold Mine in Northern Napa County, California. The mine was in production from 1985 to 2004 and produced 3.4 million ounces of gold. He was a long-time member of GSN, ATPG and SME.

In 1985, Don became Vice President and Director of Homestake International. His travels took him to the South Pacific, Asia, South America and North America. In 1990, Don ventured out and formed his own exploration company, Gustafson Minerals International. In 2000, Don went to work for Golden Cycle Gold Corporation as the Vice President of Exploration. He worked in China and Nevada. In 2008, he decided to travel less for work and became a director for Columbus Gold out of Vancouver, Canada. He and Marilyn enjoyed traveling and cruising to many foreign countries and the U.S. He was a member of Montreux Golf Club for many years and enjoyed golfing, sailing, tennis and bridge.

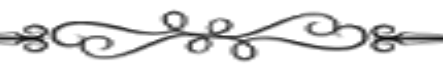
Don was a supportive husband, father and grandfather who was always there for his family and who instilled his love for travel in his daughters and grandchildren. Don's pride and joy were his grandchildren and he went to all of their sporting and school events while he was able.

Don is preceded in death by his parents, Floyd and Marjorie. He is survived by his wife, Marilyn, daughters, Dawn Welsh (Cary Welsh) from Reno and Kimberley Gustafson (Nic Capule) from Larkspur, CA, his grandchildren, Connor and Amber Welsh from Reno, his sister, Nancy Hopkins and brother-in-law, Dr. Jim Hopkins from Des Moines, IA, sister-in-law, Charlene Warr from Covina, CA, and several nieces and nephews.

A celebration of life was held on Thursday, June 15 at South Reno United Methodist Church, Reno, NV. Burial will be held in the Walnut Cemetery, Walnut, IL.

In memory of Donald Gustafson, gifts can be made to the University of Colorado for an endowment to be used towards scholarships for students in the Geology Department. Point of contact is: Jasmin Brooks, University of Colorado, Office of Advancement, 1305 University Avenue, Boulder, CO 80302. Or, a donation may be made to the First Christian Church, 109 Red Oak Road, Walnut, IL, 61376.

(Published in Reno Gazette-Journal on June 4, 2017 - <http://www.legacy.com/obituaries/rgj/obituary.aspx?n=donald-l-gustafson&pid=185692836>)



James H. Trexler Jr.

July 21, 1946—May 15, 2017

James H. Trexler, Jr., age 70, loving husband, father, sibling, and friend, passed away on May 15, 2017, after 55 cancer-free years followed by 15 valiant years living with multiple myeloma. Jim was a dedicated professor, mentor, and researcher. Born in Washington, D.C, he grew up in Oxon Hill, Maryland; he was an Eagle Scout. Jim was a broadly inquisitive individual whose passion for the outdoors became part of his professional career. He was a geologist interested in what sedimentary rocks tell us about the Earth's history and the construction and erosion of mountains. Jim's academic career followed his military service and international travel as a trumpet player in the United States Navy Band. He received his geologic training through the (Continued on pg. 17)

OBITUARIES

(Trexler, J. continued from pg. 16)

University of Maryland (B.S., 1974), University of Oklahoma (M.S., 1976), and, after several years at the U.S. Geological Survey with three field seasons in Alaska, the University of Washington (Ph.D., 1984).

After teaching geology at Weber State University in Utah, Jim moved to Reno with wife Pat to start a 31-year career on the geology faculty at the University of Nevada, Reno. He thrived on the intellectual fun and challenge provided by studying geology with his students and colleagues throughout the western U.S., many of whom became his lifelong friends. He loved field-work, and spent several decades of summer field seasons on meticulous research with his students in the Basin and Range, Colorado Rockies and Colorado Plateau.

Jim was a man of many interests and skills in addition to his geology-related pursuits. He was a musician, downhill skier, cyclist, amateur astronomer, wood-worker, boat repairman, bird-watcher, hiker, and reader. Jim is survived by his companion, fellow geologist and wife, Pat Cashman, and by their twins, Susie and Chad Trexler. He is also survived by his two brothers, Sam and Pete, Sam's wife Margith, and their children. In addition, he is survived by his extended family, including: Kathy Cashman, Sue Cashman, Harvey Kelsey, Kathy Kelsey, Emma Kelsey, and Josh Koch. Jim was pre-deceased by his parents, James and Frances, and by his mother-in-law and father-in-law, Kay Moran Cashman and Charles Cashman.

Many friendships supported Pat and Jim over the years; Jim's family particularly appreciates the friendship of Kirsten Lorenzen, Bob Sheridan, and Steve and Jan Schiff. We are grateful to many caring medical professionals at Cancer Care Specialists (Reno) and at St. Mary's, Renown, Stanford, and UCSF. Finally, we would like to acknowledge Jim's upbeat, stalwart, and positive attitude. If all it took to be alive was persistence, strength, and a fierce love of life, he would still be enjoying the outdoors with us.

In lieu of flowers, Jim's family suggests donations to one of his favorite charities: [Doctors Without Borders](#), the Environmental Defense Fund, or the Student Conservation Association.

From Marie Russell, Department of Geological Sciences and Engineering, University of Nevada, Reno:

You are invited to attend a celebration of the life of Dr. Jim Trexler on **August 30th, 2017, from 4 to 7 PM.** We are gathering at the **Peavine Pavilion at Rancho San Rafael Park** to share our memories of Jim and to honor his life and his work. Please join us for barbeque, beer, geology talk, and a celebration of Jim's remarkable life.

If you have any photos of Jim that you would like to share, bring them along! If you cannot attend but would like to share your memories with his family, forward your thoughts, pictures, etc to me and i will see that they are circulated.

Please let me know if you have any questions.....

Regards,

Marie Russell,

Phone: 775-784-6050, marierussell@unr.edu

OTHER UPCOMING EVENTS

20 Aug 2017 - 23 Aug 2017 • SGA 2017 — 14th Biennial Meeting of Society for Geology Applied to Mineral Deposit, Québec City Convention Center, Québec, Canada. Click on the link for more information: <http://sga2017.ca/>

22 August: Arizona Geological Society Meet and Greet Networking Event. 6 p.m. to 9 p.m. Our regular August dinner meeting has been canceled in lieu of a new meeting format networking mixer, which will be held at Borderlands Brewing on Tuesday, August 22, 2017 between 6 and 9 PM. Please click on the link to RSVP and find directions: <http://www.arizonaageologicalsoc.org/event-2580589>

12-16 September: Association of Environmental & Engineering Geologists, 60th Annual Meeting, Antlers Hotel, Colorado Springs, CO. Click on the link for more information. <https://www.aegannualmeeting.org/>

15-17 September: the NMEC (Nevada Mineral Exploration Coaliton) is hosting the 5th Annual Great Basin Rendezvous at Camp Lamoille near Elko, NV. Contact Dave Shaddrick, Dave@dshaddrick.com or Warren Thompson wfthompson@frontiernet.net for more information.

17-20 September: SEG 2017 Conference: Ore Deposits of Asia: China and Beyond. Beijing, China. Website: <http://www.seg2017.org/>

PAID ADVERTISEMENTS

Data Analytics
Geologic Reports
UAV Aerial Mapping
Spatial Data Compilation
Geology & Map Illustration
Resource Data Files
3D Modeling



DAVID BARNETT
PROFESSIONAL GEOLOGIST
david.barnett@mtncarto.com
(970) 628-0510

mtncarto.com

NEVADA EXPLORATION GIS DATA SETS
HIGHEST QUALITY™

MINERAL OCCURRENCES
GEOCHEMISTRY
GEOLOGY
GEOGRAPHY
GEOPHYSICS
CULTURE
POLITICAL

website: www.greatbasingis.com
email: jlaravie@frontiernet.net
phone: 775-777-8223

OREAS

Certified Reference Materials

OREAS gold CRMs are the most homogeneous available and provide unrivalled confidence in your assay data

North American Distributor:
Analytical Solutions Ltd
www.explorationgeochem.com
Tel: (+416) 462 9124
Email: info@mail.explorationgeochem.com

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

FORGE
ORBIT GARANT
DRILLING

For more information please contact Garth Patterson @403-601-4374 or garth.patterson@telus.net

TOM CARPENTER

CONSULTING GEOPHYSICIST

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



MINERAL EXPLORATION SERVICES AND CONSULTING

We specialize in a full range of services including:

- Claim Staking
- Exploration Project Management
- Contract and Consulting Geology
- Soil Sampling
- 2D and 3D GIS
- Drill Core Processing

Call us at 775.340.2395 for a free estimate on your next project.

For more information on our services visit our website at www.Rangefront.com



Right Solutions · Right Partner
www.alsglobal.com

ALS & TERRACORE INTERNATIONAL

- › Providing a one-stop shop for core services, spectral imaging and geochemistry.
- › Core Image Spectrometer™ available in ALS laboratories around the world.
- › Our facilities offer core cutting, core photography and full geochemical services.
- › Hyperspectral data interpreted via high-speed, semi-automated computer algorithms, constrained by style of mineralization or deposit type

Contact us to discuss solutions:

- ✉ clientservicesusa@alsglobal.com
- 🌐 alsglobal.com/minerals



hardrockwheels@yahoo.com

HARD ROCK WHEELS, INC.
 4WD Pickup Rentals

Howard J. Adams
 14756 Pine Knolls Ln.
 Reno, Nevada 89521
 (775) 852-2622
 Fax (775) 852-2075

Taiga Ventures
 2700 S. Cushman St.
 Fairbanks, AK 99701
 (907) 452-6631

Coeur Products

DRILL IT. // FILL IT.

COREBOX.COM

AMERICAN ASSAY
 laboratories

Fire Assay, ICP-OES/MS,
 XRF, LECO, Custom Prep, BLEG

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



Bureau Veritas Minerals

Industry Leading Solutions for the Exploration & Mining Community

- Geochemical, Metallurgical & Mineralogical Services
- Laser Ablation, Core Logging Services & XRF
- Ore & High Grade Analysis
- Industry Leading Quality Assurance
- On-Site Services



+1 775 359 6311 | bvmininfo@ca.bureauveritas.com | www.bureauveritas.com/um

MINERALS



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

NORTH AMERICAN EXPLORATION

GEOLOGY • CLAIM STAKING • GEOCHEM SAMPLING • LANDWORK



DAVID MORRIS
PRESIDENT • GEOLOGIST

895 N. MARSHALL WAY, SUITE A
LAYTON, UT 84041

801.546.6453
DMORRIS@NAE-EXPLORATION.COM



- LARGE NEVADA PROPERTY PORTFOLIO
- DRILL READY PROJECTS - FOR SALE or OPTION
- PROPERTIES PURCHASED
- ROYALTIES PURCHASED - PRODUCING or NOT

Trey Wasser - President & CEO
(972) 803-3087 - office
(940) 368-8337 - mobile
trey@elygoldinc.com

Jerry Baughman - President, NSR
office - (775) 853-1913
mobile - (702) 592-6992
jbaughman@elygoldinc.com

For Company & Property information go to:

www.elygoldinc.com

JBA WORKS, INC.

Jo Beth Allen
Geologist

GIS, Presentation Maps & Data Graphics

GIS / CAD
Slide & print Graphics / Illustrator & Photoshop

1055 Joshua Drive
Reno, Nevada 89509

jobethallen@sbcglobal.net
Phone: 775-303-6818



GeoSequel Drill Hole, Blast Hole &
Sample Management Program

QUIT CHASING DATA!

One Location • Easy-to-Access • User friendly
Searchable • Accurate



www.TerraSourceSoftware.com
info@TerraSourceSoftware.com
775.856.2913

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**



Serving Mining in Nevada Since 1992

General Engineering Contractor

**Drill Pads
Road Building
Reclamation
Earthwork**

Office: 775-753-5832
Mobile: 775-778-1681
Mobile: 775-934-1837
www.legarza.com

NV License #35480
CA License #804120

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

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

August

G.S.N. NEWSLETTER ADVERTISING RATES

Business Card Ads—\$50.00 month

1/4 Page Ads—\$150.00 month

1/2 Page Ads—\$300.00 month

Full Page Ads—\$450.00 month

10% Discount for running 10 ads (1 year)!

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

MORE TRAVELLING GSN BACKPACK PHOTOS (submit your photos anytime!):

Hiking on the GSN Field Trip in May
(submitted by Laura Ruud)



Ambergris quay, Belize, May 2017
(submitted by Mary Stollenwerk)



Attending the GSN Reno Aces Night
(submitted by Bob Felder)

