

# GEOLOGICAL SOCIETY OF NEVADA NEWSLETTER

Geological Society of Nevada, 2175 Raggio Parkway, Room 107, Reno, NV 89512  
(775) 323-3500 - Hours Monday -- Friday, 8 a.m. to 4 p.m.  
Website: [www.gsnv.org](http://www.gsnv.org) • E-mail: [gsn@gsnv.org](mailto:gsn@gsnv.org)



August 2012, Vol. 28, No. 6

Published monthly except June and July

## CALENDAR OF GSN EVENTS

### PRESIDENT

**Dave Emmons**  
Kinross Gold USA, Inc.  
[demmons@sbcglobal.net](mailto:demmons@sbcglobal.net)

### VICE PRESIDENT

**Tommy Thompson**  
University of Nevada, Reno-Mackay  
[thompstommyt@aol.com](mailto:thompstommyt@aol.com)

### SECRETARY

**John Hoskins**  
[cbtr63@sbcglobal.net](mailto:cbtr63@sbcglobal.net)

### TREASURER

**Bob Kastelic**  
Consulting Geologist  
[bob\\_kastelic@yahoo.com](mailto:bob_kastelic@yahoo.com)

### MEMBERSHIP CHAIR

**Carmen Arbizu**  
Inspectorate America Corp.  
[carmen.arbizu@inspectorate.com](mailto:carmen.arbizu@inspectorate.com)

### PUBLICATION CHAIR

**Keith Fowlow**  
Kinross Gold USA, Inc.  
[Keith.Fowlow@kinross.com](mailto:Keith.Fowlow@kinross.com)

### OFFICE MANAGER

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

### GSN BOARD OF DIRECTORS

**Chairman**  
David Shaddrick

**GSN President**  
Dave Emmons, Current

**Most Recent Past GSN President**  
Bill Howald

**Elko Chapter President**  
Jared Townsend

**So. Nevada Chapter President**  
Paul Bowen

**Winnemucca Chapter President**  
Leann Giese

**Class A, 2012-2015**  
Lynne Volpi  
Randy Vance

**Class B, 2010-2013**  
David Caldwell  
Marcus Johnston

**Class C, 2011-2014**  
David Shaddrick (Chairman)  
Camille Prenn

**Aug 10, 2012**  
Friday

### WINNEMUCCA CHAPTER SUMMER BBQ

The BBQ will be held at the Vesco City Park, Mizpah and Haskell St., Winnemucca. Catered BBQ from 5:00 to 7:00 PM. **Food & Drinks Sponsored by ALS Minerals.** Contact Leann Giese at [leann.giese@newmont.com](mailto:leann.giese@newmont.com) or Peter O'Byrne at [peter.o'byrne@newmont.com](mailto:peter.o'byrne@newmont.com) for more information.

**Aug 16, 2012**  
Thursday

### ELKO CHAPTER SUMMER BBQ

The monthly BBQ will be held at the Duncan Little Creek Gallery Bar Backyard, 518 Commercial St. BBQ begins at 6:00 p.m. For more info. contact Jared Townsend at [jtownsend@barrick.com](mailto:jtownsend@barrick.com).

**Sept 12, 2012**  
Wednesday

### WINNEMUCCA CHAPTER (Every 2nd Wednesday of the month)

The monthly meeting will be held at the Martin Hotel, 94 West Railroad St. Drinks and Appetizers @ 6:30 PM, Talk @ 7:00 PM. For more information contact Leann Giese at [leann.giese@newmont.com](mailto:leann.giese@newmont.com).

**Sept 20, 2012**  
Thursday

### ELKO CHAPTER (Every 3rd Thursday of the month)

The monthly meeting will be held at the Western Folk Life Center, 501 Railroad St. Refreshments at 6:00 PM, Talk at 7:00 PM. For more info. contact Jared Townsend at [jtownsend@barrick.com](mailto:jtownsend@barrick.com).

**Sept 21, 2012**  
Friday

### GSN MEMBERSHIP MEETING (Every 3rd Friday of the month)

The monthly meeting will be held at the Reno Elks Lodge, 597 Kumle Lane, Reno. Drinks at 6:00 PM, Dinner at 7:00 PM, Talk at 8:00 PM. **SPEAKER:** Adam Simon, University of Michigan. **Sponsor for the evening is: Boart Longyear.** Dinner reservations must be made by NOON Thurs., Sept 20th. Call Laura Ruud at (775) 323-3500; or email: [gsn@gsnv.org](mailto:gsn@gsnv.org). **\$18/each**

**Sept 27, 2012**  
Thursday

### SOUTHERN NEVADA CHAPTER (Every Last Thursday of the month)

The monthly meeting will be held at the Lilly Fong Geoscience building at UNLV, Room 105. Social hour begins at 6:45 pm with the speaker starting at roughly 7:15 pm. **Speaker TBA.** For more information contact R. Paul Bowen, 702-247-7765.



**FROM THE PRESIDENT**  
**David Emmons, G.S.N. President 2012—2013**

Dear Members of GSN,

We are all now engaged in the peak of the summer field season. I bet that some of the field work will lead to some exciting new targets and discoveries in Nevada. The geologist that breaks the most rocks wins!

The headline from *The Mining Record* (June 2012) reported that Barrick has more than fifty drill rigs operating in Nevada. Kudos to Barrick and their exploration team for all of the success that they have had at Cortez: Cortez Hills and Goldrush, with more than 20 million ounces of gold. Other Nevada Giant gold deposits are still waiting for drill holes to discover them and unlock their riches.

The May GSN meeting was well attended. An excellent presentation was given by Lindsey Clark on the breccias and gold mineralization at Barrick's Cortez Hills deposit on the Battle Mountain-Cortez trend. Lindsey is an M.S. Geology student at UNLV. Her co-authors are Jean Cline and Adam Simon. They are Lindsey's advisors at the university and professors of geology. Clark's research has developed new insight into the paragenetic relationship of the breccias and gold mineralization at Cortez Hills. She has also identified some rare minerals associated with the mineralization, such as aktashite ( $\text{Cu}_6\text{Hg}_3\text{As}_4\text{S}_{12}$ ) and routhierite/christite ( $\text{TIHgAsS}_3$ ). If you missed the presentation, the abstract is in the May Newsletter.

GSN has two new members in the Executive Committee, Tommy Thompson as Vice President, and Keith Fowlow as Publications Chair. Tommy will be busy planning the GSN Fall Field trip. Announcements will be sent out as the dates and location of the trip are set. The spring trip was a success with visits to the Yerington area copper deposits and the gold and silver deposits in the Tonopah district.

Bill Howald is the outgoing President and Mary Stoltenwerk is the outgoing Publications Chair for GSN. Bill did a great job as President and served as the Vice President the previous year. He arranged excellent speakers for the meetings and the December meeting may have had record attendance. He was

also instrumental in increasing the membership to over 1,200. Mary has worked hard for GSN in getting an interactive map of GSN publications on the website. GSN will continue this work to upgrade the GSN website. Please thank Bill and Mary when you see them for their contributions to GSN.

Laura Ruud has now been the Office Manager for just under a year. She has done an outstanding job. Laura is the go-to person when the EC has questions. Her work in organizing the field trips including the logistics is invaluable. She and Carmen Arbizu were instrumental in achieving the high level of membership. We will make every effort to increase the membership in 2012-2013. Please be sure to renew your membership and ask a non-member colleague to consider joining GSN.

I look forward to my term as President of GSN and working with the EC and the BOD. GSN is fortunate to have an excellent leadership team. All of their work for GSN is on a volunteer basis and is in addition to their day jobs. If you have a topic that you think would be of interest for one of the presentations for the monthly meetings please let me know and we will give it consideration. There are nine monthly meetings in Reno from September through May. Adam Simon, formerly a professor at UNLV, will be the speaker for September. He has recently accepted a position at the University of Michigan.

Here is a quote from one of my favorite writers:

***"With their four-dimensional minds, and their interdisciplinary ultra verbal way, geologists can wiggle out of almost anything."*** - By John McPhee.

Signing off for now – see you at the September GSN Meeting.



**Thanks to HARRIS EXPLORATION DRILLING & ASSOCIATES**  
**For Hosting the May 17, 2012 Meeting!**



## GSN at the Reno Aces Ballgame

July 28, 2012



About 70 GSN members and friends attended the Reno Aces versus the Sacramento River Cats baseball game in downtown Reno on Saturday evening. Unfortunately, Sacramento trounced Reno 13 to 4 in nine innings. The fans enjoyed hot dogs, BBQ chicken and beverages prior to the game in the Coors Light Party Zone area of the stadium with a view from left field. The weather was perfect for the game. It was great to have another chance for an evening of conversation among the members. The drilling company National EWP helped sponsor the event and also visited each GSN table to buy beverages and snacks for the GSN audience. Thanks again to National EWP, and especially Jim Bruneio and James Stephens, for their continuous and generous support of GSN.



## *GSN September 21, 2012 Membership Meeting*

### **Reservations Are Required - Please Cancel if You Are Unable to Attend**

GSN CAN NO LONGER GUARANTEE DINNER SEATING WITHOUT ADVANCE RESERVATIONS.

Please call 775-323-3500, Fax 775-323-3599 or e-mail [gsn@gsnv.org](mailto:gsn@gsnv.org) by **NOON on Thursday, Sept. 20, 2012.**

Social Hour: 6:00 PM – Dinner: 7:00 PM – Speaker: 8:00 PM

**\$18.00 per person** (note new price. The attendees voted at the March meeting to cover the caterer's additional costs for china plates and being able to sit at the dinner tables during the talk)

Location: Elks Lodge, 597 Kumle Lane, Reno, NV  
Directions: across (W) from the Reno-Sparks Convention Center  
(S. Virginia Street, behind the Les Schwab Tire Center)

# **“FACES OF GSN”**

**Will & Lucia Shumway**



**Lucia (Patterson) Shumway & Will Shumway at Arches National Park**

Lucia Patterson was born and raised in Susanville, CA where she went through High School and then Junior college there in California at Shasta College in Redding, CA. She has an AA degree in Environmental Resources and Technology, and this got her a job working for the state with a Forest Service study. She was first interested in geology by the rocks she saw during her Forest Service time, as well as her grandfathers' rocks collection. Lucia decided to enroll at the California State University at Chico, earning her bachelor's in geology. The bug was still with her, so she then attended the Mackay School's CREG (Center for Research in Economic Geology) under John Muntean, the Research Geologist for the Nevada Bureau of Mines & Geology. She graduated with her Masters Degree in Economic Geology in 2009.

Will was born in Kellogg, ID and was moved around the country by his Father, a Mining Engineer, and his Mother, a Geologist. He and his brother were taken on trip after trip to interesting geological  
(continued on pg. 5)

(Faces of GSN, cont. from pg. 4)

sites and old abandoned mines. This was very interesting to him and held his attention for a long time.

After eight years in the U.S. Army, working construction jobs, and as an electrician, he enrolled at the Consumnes River College in Sacramento, CA. Will decided to take a geology class because his parents could help with homework and was instantly hooked. He earned his AA degree in General Education then enrolled in the Mackay School at the University of Nevada, Reno. He was an active member of student clubs such as the Student SME and the Mackay Rockhounds, and had professional memberships in GSN and AIPG. He graduated in 2009 with a degree in Economic Geology.

They moved to Spring Creek, NV in the winter of 2010, where they still live today. They have both been GSN members since 2006.

Lucia is currently working for Timberline Resources Inc. on their exploration project outside of Eureka, NV. She has been with Timberline for a year, and before that was with Staccato Gold on the Windfall Canyon Project. She has been working in the Eureka District for about five years.

Will is working as an Ore Control Geologist for the Barrick Cortez Underground. He has been at Cortez for three years, first as the Drill Development Geologist, and then moved into Ore Control in December of 2011. He is the Chairman of the Northeastern Nevada Section of SME and is still active with the Elko GSN.

Will and Lucia are just starting out in their careers. GSN will have to revisit them in the year 2042 or so to see where they have been and what they accomplished in their lives!

**NEW (OLD) HOURS OF OPERATION!!**

**THE N.B.M.G. PUBLICATION SALES  
AND INFORMATION OFFICE**

**HAS NOW RE-OPENED FOR BUSINESS  
ON MONDAYS. THE GSN OFFICE WILL  
AGAIN BE OPEN FOR WALK-IN  
BUSINESS ALONG WITH THE NBMG!**

**OFFICE HOURS ARE MONDAY-FRIDAY**

**8 AM TO 4 PM**

*Thank you to our  
generous donors in May,  
June and July!!*

**G.S.N. FOUNDATION**

Hazel Reynolds  
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**STUDENT DINNER FUND**

Del Flint

**STUDENT FIELD TRIP FUND**

Mark Larsen Ferns  
Dennis Robblee  
Thomas Roberts

## GSN Spring 2012 Field Trip Wrap-Up

By Dave Emmons

On May 5 and 6, 2012 GSN had a successful field trip down the Walker Lane. About 45 GSN members and friends attended the trip. Field trip stops included Quaterra's MacArthur Copper Project and the Anaconda pit in Yerington, Nevada Copper's Pumpkin Hollow Project, Allied Nevada Gold's Three Hills Gold Project and we wrapped up Sunday afternoon with a tour of the Tonopah Historic Mining Park. At the park Fred Saunders gave a presentation on the Tonopah District. The guidebook for the trip is GSN Special Publication No. 54.

George Eliopoulos, Todd Bonsall, Joe Lori and Dave Heatwole (former Anaconda geologist at the Yerington copper mine) gave excellent presentations and site visits to the former Anaconda copper mine and the MacArthur copper development project.

Greg French provided a look at the core from Pumpkin Hollow. It was great to see core with visible mineralization (copper). He also gave a map and cross section presentation on geology and mineralization. It is an exciting project and it will be great for Nevada to have a new copper mine.

Glen Carter and Chris Dunbar were great to accommodate our late arrival at the Three Hills Gold Project in Tonopah. The bus just wanted to take Sunday morning off after driving from Reno to Tonopah on Saturday. Glen and Chris gave all of the attendees an in-house summary report on the projects. Then the group (or most of the group) hiked up to the top of Three Hills for a look at the geology. Thank you to Dave Flint (Allied Nevada) for allowing GSN to visit the project.

On Saturday night, we stayed at the recently re-opened and very nicely renovated historic Mizpah Hotel in downtown Tonopah. We gathered for libations and dinner at the hotel.

Also, thanks to the sponsors for the field trip, **American Assay Laboratories, Boart Longyear, DOSECC Exploration Services, Mine Development Associates, Quaterra Resources Inc. and Singatse Peak Services, LLC.** The trip was much more fun with your generous support of food and drink! Joe Laravie is thanked for providing all of the GIS maps for this guidebook. Check out Joe's website [www.greatbasingis.com](http://www.greatbasingis.com)

The field trip group thanks Sandy Swindle, bus driver, for getting the bus fixed and all of us safely back to Reno.



Presentation at the Anaconda copper pit at Yerington  
Dave Heatwole with Quaterra Alaska in yellow hard hat.

# G.S.N. Spring 2012 Field Trip Photos:



Presentation by Greg French at Pumpkin Hollow. Photo by D. Emmons



Raffle Winner, Jennifer Manion Baar, receives an enthusiastic congratulations from Sarah Peters.



Joe Hebert takes advantage of the broken down bus by catching a nap.



Glen Carter gives a geologic overview on a walking tour of the Three Hills project area.

W-F-S-M-T-R

## *Activity Update*

Mike Brady, June 2012

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

### **NEVADA**

Quaterra Resources Inc. announced that based on recent studies at the MacArthur Project, oxide+chalcocite resources aggregate 159,100,000 tonnes @ 0.21% Cu measured+indicated and 243,400,000 tonnes @ 0.20% Cu inferred. (was 144,500,000 tonnes @ 0.21% Cu measured+indicated) *M.J.:* May 25

Coral Gold Resources Ltd. announced that recent drill results at the Robertson Project include 16.6-135.9 meters @ 0.84 gpt Au (CC12-2) and 15.1-155.5 meters @ 0.44 gpt Au (CC12-3). (resource = 82,986,000 tonnes @ 0.85 gpt Au inferred) *M.J.:* June 8

Gold Standard Ventures Corp. announced that recent drill results at the East Camp Douglas Project include 0-9.1 meters @ 1.0 gpt Au (ECD12-1); 158.5-175.9 meters @ 2.31 gpt Au (ECD12-1) and 114.3-155.5 meters @ 0.50 gpt Au (ECD12-3). *Press Release:* May 16

Gold Standard Ventures Corp. announced that recent drill results at the Railroad Project include 237.4-401.1 meters @ 3.38 gpt Au (RR12-1a) and 189.0-206.7 meters @ 0.41 gpt Au (RR12-2). *Press Release:* April 26

Sandstorm Gold Inc. announced that it acquired a 2.5% NSR on the Mt. Hamilton Property from Solitario Exploration and Royalty Corp. for \$10,000,000 over 1 year. (reserve @ Centennial = 20,479,000 tonnes @ 0.75 gpt Au proven+probable) *Press Release:* June 11

Columbus Gold Corp. announced that recent drill results at the Brown's Canyon Project include 24.4-30.5 meters @ 0.34 gpt Au (BN-9); 126.0-131.1 meters @ 0.23 gpt Au (BN-10); 27.4-39.6 meters @ 0.67 gpt Au (BN-12) and 59.5-68.6 meters @ 0.79 gpt Au (BN-19). *Press Release:* June 14

Roscan Minerals Corp. announced that it terminated its interest in the Golden Mile Property of Columbus Gold Corp. *Press Release:* June 14

International Minerals Corp. announced that recent drill results at the Converse Project include 318-463 meters @ 0.62 gpt Au (CONV-07C); 24-88 meters @ 1.14 gpt Au (CONV-08C); 75-126 meters @ 0.89 gpt Au (CONV-09C) and 26-81 meters @ 0.70 gpt Au (CONV-10C). (resource = 224,600,000 tonnes @ 0.49 gpt Au measured) *Press Release:* May 29

Yukon-Nevada Gold Corp. announced that it would process 15-30 tons/month of loaded carbon from the Hycroft Mine of Allied Nevada Gold Corp. at its Jerritt Canyon Facility. *Press Release:* June 7

Valor Gold Corp. announced that it acquired an option to earn a 100% interest in the Red Rock and North Battle Mountain properties from Pershing Gold Corp. for \$2,000,000 and 25,000,000 shares. *Press Release:* May 29

Timberline Resources Corp. announced that it acquired an option to purchase a 100% interest in the Seven Troughs Property from private interests for \$50,000 and a retained royalty. *Press Release:* June 21

Silver Predator Corp. announced that recent drill results at the Taylor Project include 45.72-54.86 meters @ 222.5 gpt Ag (SPD12-037); 0-45.72 meters @ 108.7 gpt Ag (SPD12-040); 0-35.05 meters @ 38.7 gpt Ag (SPD12-041) and 18.29-38.1 meters @ 54.3 gpt Ag (SPD12-043). (resource = 5,845,000 tonnes @ 78.8 gpt Ag measured+indicated) *Press Release:* June 19

Rye Patch Gold Corp. announced that based on recent drill results at the Wilco Project, resources aggregate 25,115,000 tonnes @ 0.41 gpt Au, 3.8 gpt Ag measured; 89,028,000 tonnes @ 0.33 gpt Au, 3.1 gpt Ag indicated and 52,599,000 tonnes @ 0.32 gpt Au, 3.6 gpt Ag inferred. *Press Release:* June 27

Scorpio Gold Corp.(70%) announced that recent drill results at the Mineral Ridge Project include 94.51-105.18 meters @ 8.25 gpt Au (MR12385); 92.99-100.61 meters @ 2.01 gpt Au (MR12386) and 32.01-35.06 meters @ 2.91 gpt Au (MR12388). (resource = 4,230,000 tonnes @ 1.47 gpt Au indicated) *Press Release:* June 25



Activity Update, June 2012 (cont.)

Miranda Gold Corp. announced that recent drill results at the Big Blue Project include 352.0-355.1 meters @ 0.52 gpt Au (BBR12-01) and 329.2-330.7 meters @ 0.39 gpt Au (BBR12-02). *Press Release: June 21*

Midway Gold Corp.(40%) announced that recent drill results at the Spring Valley Project include 273.1-409.3 meters @ 0.75 gpt Au (SV11-516C); 204.2-265.2 meters @ 1.03 gpt Au (SV12-562) and 249.0-457.2 meters @ 0.93 gpt Au (SV12-564). (resource = 145,100,000 tonnes @ 0.48 gpt Au measured+indicated) *Press Release: June 12*

Klondex Mines Ltd. announced that recent underground drill results at the Fire Creek Project include 143.41-150.45 meters @ 8.14 gpt Au (KC12-01U); 151.64-155.45 meters @ 5.84 gpt Au (FC12-02U); 89.31-95.4 meters @ 1.96 gpt Au (FC12-033U) and 150.21-157.89 meters @ 3.72 gpt Au (FC12-034U). (resource = 5,176,000 tonnes @ 9.9 gpt Au indicated) *Press Release: June 18*

Hecla Mining Co. announced that it acquired an option to purchase a 100% interest in the Monte Cristo Property from Crown Gold Corp. for \$5,500,000. (resource = 3,481,000 tonnes @ 3.14 gpt Au, 17.0 gpt Ag inferred) *Press Release: May 29*

Corvus Gold Inc. announced that recent drill results at the North Bullfrog Project include 2.2-92.5 meters @ 0.35 gpt Au (NB12-130); 56.7-123.9 meters @ 0.39 gpt Au (NB12-131); 28.4-106.4 meters @ 0.35 gpt Au (NB12-132) and 12.8-74.1 meters @ 0.48 gpt Au (NB12-133). (resource = 15,230,000 tonnes @ 0.37 gpt Au indicated) *Press Release: June 12*

Atna Resources Ltd. announced that based on recent studies at the Pinson Project, resources aggregate 2,654,500 tonnes @ 12.56 gpt Au measured+indicated and 2,033,000 tonnes @ 12.9 gpt Au inferred. (was 2,648,000 tonnes @ 12.6 gpt Au measured+indicated and 2,028,000 tonnes @ 13.0 gpt Au inferred) *Press Release: May 31*



NEVADA MINERAL EXPLORATION COALITION

The "Voice" of Nevada Exploration

P.O. Box 1734  
Elko, NV 89803  
www.nvmec.org

October

1

Join Us!

Join us at this year's Annual General Meeting to discuss the current issues that the exploration community faces. The event will be an all day event with lunch during the day and heavy hors d'oeuvres immediately following the conference.

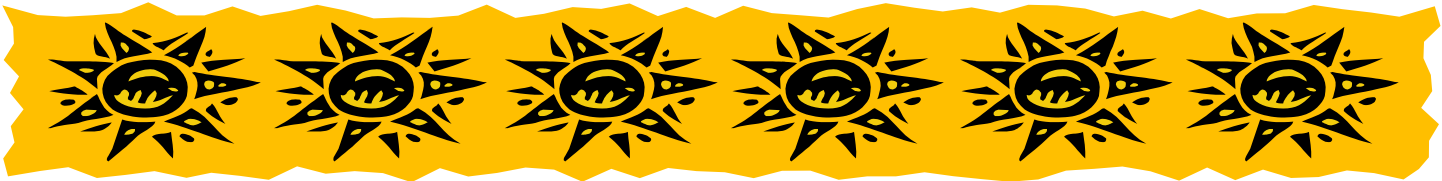
**Date Revision:**

Due to scheduling conflicts, we have changed the date of the Nevada Mineral Exploration Coalition's Annual General Meeting from the old date of September 10 to **Monday, October 1**. The event will still be held at the Atlantis Casino & Resort in Reno, NV. The details of the conference will largely stay the same.... Thank you for your flexibility and we look forward to seeing you on October 1.

*Dave Shaddrick*

President, Nevada Mineral Exploration Coalition





**G.S.N. WINNEMUCCA CHAPTER**  
**SUMMER BBQ**

**FRIDAY, August 10, 2012**  
**5:00 p.m.—7:00 p.m.**

Come meet the New officers and get  
reacquainted with old friends.

**Location:** Vesco City Park in Winne-  
mucca, Mizpah St. and Haskell

**Food:** Catered by The Martin

**Sponsored by:**



**G.S.N. ELKO CHAPTER**  
**SUMMER BBQ**

**Thursday, August 16, 2012**  
**6:00 p.m.—9:00 p.m.**

**Duncan Little Creek Gallery Bar**  
**Backyard**  
**518 Commercial Street**



**ELKO CHAPTER**  
**JUNE 2012 MEETING SPONSOR**

**ELKO CHAPTER**  
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**Thanks to**  
**JBR Environmental Consultants**  
**for sponsoring the**  
**Elko Chapter meeting in May!**

**Thanks to**  
**Inspectorate America Corp.**  
**for sponsoring the**  
**Winnemucca Chapter**  
**meeting in May!**

Welcome back to the GSN for Fiscal Year 2013! We will begin our membership drive in September but if you'd like to get a jump start on renewing your dues, I am including a membership form here for your convenience. Also, our online registration went live in December 2011 so if you'd like to renew online using PayPal please follow this link: <http://www.gsnv.org/membershipform.php>

# GEOLOGICAL SOCIETY OF NEVADA

# 2013

2175 Raggio Parkway, Room 107, Reno, NV 89512 USA

Phone (775) 323-3500 • Fax (775) 323-3599 • [gsn@gsnv.org](mailto:gsn@gsnv.org) • [www.gsnv.org](http://www.gsnv.org)

Offices are located at NBMG's Great Basin Science Sample & Records Library at The Desert Research Institute

Office hours: 8 AM - 3:00 PM, Monday through Friday

The Geological Society of Nevada (GSN) is a non-profit, educational organization whose principal objective is to promote the advancement of geological sciences, especially as they relate to Nevada. GSN supports the dissemination of information through meetings, field trips, publications and academic endeavors. Membership is open to geologists, geophysicists, geochemists, engineers, educators, students, prospectors or anyone else with an interest in the geological sciences and/or the goals of the GSN.

The membership year begins on January 1. Annual dues of \$50.00 (\$25.00 for full time students) are due prior to December 31. The GSN conducts a Field Trip in the Fall and one in the Spring of each year. Monthly meetings are held in Reno, Winnemucca, and Las Vegas (Southern Nevada Chapter) September through May. The Elko Chapter holds meetings January through December.

Please help support the GSN Foundation when renewing. Foundation dollars are used for the Kindergarten through 12th grade Field Trip Grant Program, Nevada Mapping Grants and University of Nevada scholarships.

### MEMBERSHIP APPLICATION

Renewal  New

Date: \_\_\_\_\_

Name: \_\_\_\_\_ Position/Title: \_\_\_\_\_

**Everything is the same as before, except as indicated below.**

Consultant:  Company Name: \_\_\_\_\_

Student:  University: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Country: \_\_\_\_\_ Website: \_\_\_\_\_

Telephone) **Work:** \_\_\_\_\_ **Fax:** \_\_\_\_\_

Numbers ) **Cell:** \_\_\_\_\_ **Residence:** \_\_\_\_\_

(Your residence telephone number will not be listed in the Directory)

**E-Mail:** \_\_\_\_\_

**Email address is required for Emailed Newsletter**

- I would like to have an asterisk by my name in the directory indicating I am available for consulting.
- I have met the licensing requirements and want "QP" (Qualified Person) by my name in the directory.

I authorize GSN to send to me, via email: GSN announcements, publications updates, employment opportunities, etc.

Yes  No

### Optional Chapter Affiliation (to be eligible for chapter voting and emails from those Chapter Officers)

Elko Chapter  Southern Nevada Chapter  Winnemucca Chapter

Regular Membership Dues 2013 - Email newsletter \$50.00 (**International & Domestic**)  Honorary \_\_\_\_\_

Regular Membership Dues 2013 - Hardcopy newsletter via postal service \$70.00 (**Domestic Only**)  Honorary \_\_\_\_\_

Student Membership Dues 2013 - email newsletter only \$25.00 (Nevada students are sponsored by Geotemps, Inc.) \_\_\_\_\_

**Donations:** \_\_\_\_\_  I wish to donate to the GSN Student Dinner Fund \_\_\_\_\_

(Foundation Donated Funds will be used for unrestricted grants and scholarships unless otherwise specified below)  I wish to donate to the GSN Student Field Trip Fund \_\_\_\_\_

I wish to donate to the GSN Foundation \_\_\_\_\_

**TOTAL:** \_\_\_\_\_

Payment Type: Check # \_\_\_\_\_  Cash  Visa  Master Card  Discover

Card Number: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ 3-digit security code: \_\_\_\_\_

Signature (as it appears on card): \_\_\_\_\_

Return with payment to: Geological Society of Nevada,  
2175 Raggio Parkway #107, Reno, NV 89512  
Fax to 775/323-3599, E-mail [gsn@gsnv.org](mailto:gsn@gsnv.org)

**GEOLOGICAL SOCIETY OF NEVADA  
ANNUAL GOLF TOURNAMENT—JUNE 23, 2012  
HOSTED BY INSPECTORATE AMERICA CORP.**



**THANK YOU TO OUR AWESOME DONORS!!!  
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**INSPECTORATE AMERICA CORPORATION:** 1<sup>ST</sup>, 2<sup>ND</sup>, AND 3<sup>RD</sup> Place Awards,  
\$250.00 gift certificate towards analysis, one golf ball per person, Prizes for mens/ladies longest drive and  
closest to the hole, two golf bags, 3 boxes golf balls, assorted clubs

**CGS, INC.:** Water proof case, compass, eye loupe, caps, etc.

**UPS:** Polo Shirts & Golf Balls

**MINE DEVELOPMENT ASSOCIATES:** 2 - \$25.00 Gift Cards

**JOHN ASCUAGA'S NUGGET:** One night stay and dinner for two at Orozko's

**SILVERADO:** One night stay and dinner for two at Steak House

**SPIRO'S SPORTS BAR:** 2 - \$20 Gift Cards

**LAKERIDGE GOLF COURSE:** Round of Golf for 4

**VWR:** \$200 Scheel's Gift Card & others

**BRUCE METALS INC:** \$200 towards beer

**JUST REFINERS:** \$200 towards tournament

**ALS MINERALS:** Made in Nevada gift basket in gold pan

**GEOTEMPS INC.:** Callaway Golf Bag, cap & other items

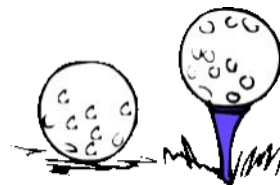
**BOART LONGYEAR DRILLING:** Camping and fishing gear

**AERO TECH MAPPING:** Aerial photo of Reno on gator board

**JBR ENVIRONMENTAL:** Hybrid Golf Club

**RACHEL DOLBIER:** Bullitt Blender

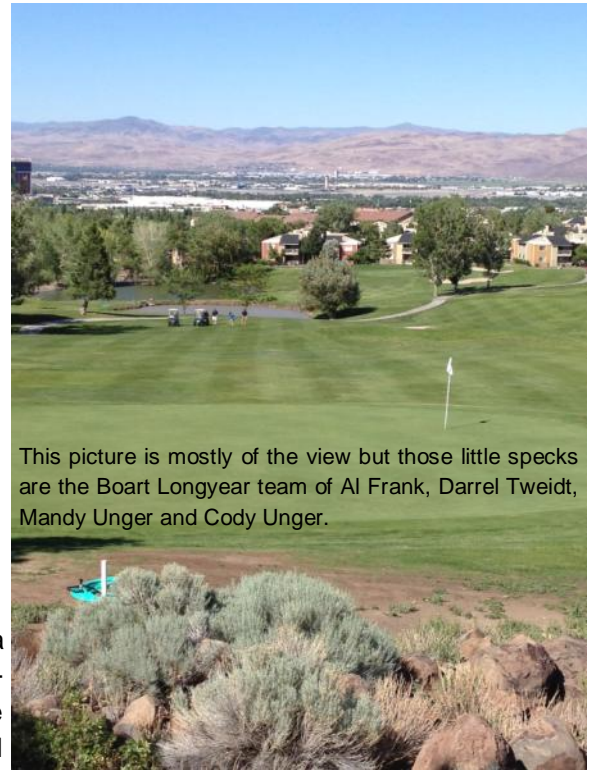
**CARMEN ARBIZO:** Water



## G.S.N. Golf Tournament 2012 photos:

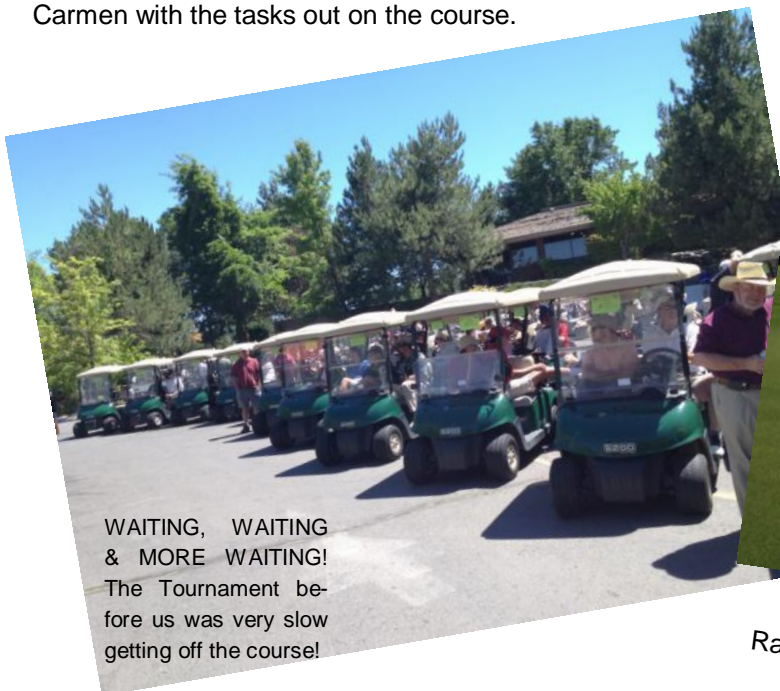


FIRST PLACE TEAM: Matt Zier, Robert Stiney, Annie Arranda and Chris Bone of Inspectorate.



This picture is mostly of the view but those little specks are the Boart Longyear team of Al Frank, Darrel Tweidt, Mandy Unger and Cody Unger.

The G.S.N. Annual Golf Tournament hosted by Insepctorate America Corp. was a resounding success! 85 golfers tested their skills (and patience!) on the links of the beautiful LakeRidge Golf Course on June 25th. Competition was fierce and the winning teams were announced at the fantastic dinner following the game. **1st Place** went to the team made up of **Annie Aranda, Chris Bone, Robert Stiney and Matt Zier**. **2nd Place** was taken by the 3 man team of **Mike Tippett, Tom Roberts and Doug Hensen**. The **3rd Place** team included **Aaron Hoberg, AJ Lingenfelter, Chris Ioannakis and Josh Zimmerman**. Other winners of the day were **Chris Bone and Sam Bonnett** who each shot Closest to the Pin on the designated holes. **Longest Men's Drive went to Nick Mongillo and Longest Women's Drive was won by Lesly Lage**. A lot of golfers won great raffle prizes that were all donated by the people and companies listed on the facing page. The GSN Foundation benefited \$1,825 from the purchase of raffle tickets and mulligans. Thanks to everyone who bought those! Even though we were delayed an hour on the start, everyone seemed to have a great time. A huge thank you goes out to Carmen Arbizio for her many hours organizing the tournament, arranging for the dinner and awards, and soliciting the raffle prizes. Also thanks to Peg O'Malley and Florrel Summers for helping Carmen with the tasks out on the course.



WAITING, WAITING & MORE WAITING! The Tournament before us was very slow getting off the course!



WooHoo! It went in after only three puts!  
Rachel Dolbier, Kaitlin Sweet & Dave Shaddrick.

# WHERE IN NEVADA??

## AUGUST CONTEST

1. Where is it ?
2. What is it ?
3. How was it formed ?

Send your entries to Laura no later than Thursday, August 16, 2012. All entries must be accompanied by your own suggested mystery geology photo taken somewhere in Nevada. The winning entry will be selected at random from among all the correct entries who also submitted a photo and a fabulous prize will be awarded.

Answer to May's "Where in Nevada ?" contest:

Mark Abrams was the winning entrant, selected at random from the pool of correct entries. He identified May's Mystery Photo. "The photo is of Pulpit Rock on the north end of the Hycroft Mine area. It is a warm spring sinter deposit formed by warm springs depositing silica into a conglomerate and into hot pots, pools and layered piles."

Mark has submitted this photo for August's contest:



WHERE IS IT? WHAT IS IT? HOW WAS IT FORMED?

Don't forget that you MUST submit your own "Where in Nevada" photo along with your answers to be eligible!!

# ROCK TALK

Reprinted from Mining.com

Mir Diamond Mine

Joshua Zapf | July 16, 2012

Owner: Alrosa

Type of Mine: Diamond. Location: Mirny, Russia. Built: 1957



Currently the second largest man-made pit in the world. This diamond mine, located in Mirny, Russia, is so massive that it creates a downdraft strong enough to enforce a no-fly zone around it. The mine, which opened in 1957, averaged 10 million carats a year until it closed in 2011.

Conditions on the site were notoriously bad. Winter temperatures dropped low enough to freeze oil and cause rubber and steel to shatter after continual use. Near the end of the mine's use it took vehicles over 2 hours to drive from the bottom of the mine up to the surface.

(Image courtesy of Alrosa Mining Company; City of Mirny at the Mir pipe, 2004)

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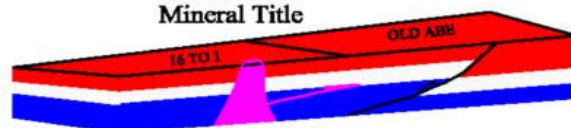
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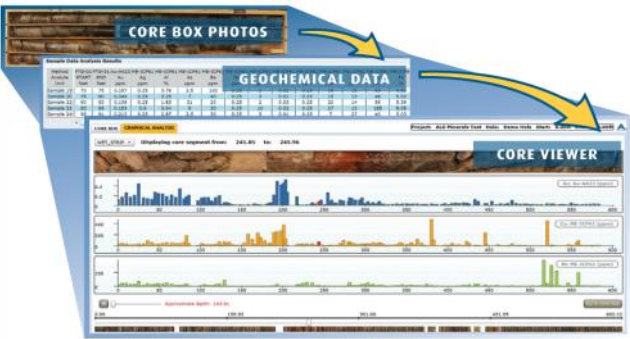
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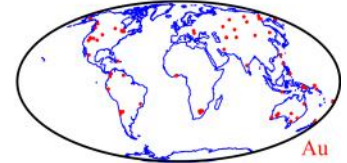
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