

# Palomar Gem and Mineral Club

VOLUME 60 - ISSUE #4  
April 2019

## BOARD OFFICERS ELECTED

President	Jef Wright
Vice President	<b>Justin Engelmeyer</b>
Secretary	<b>Fred Floyd</b>
Treasurer	Toni Floyd

## BOARD OF DIRECTORS (APPOINTED)

CFMS Chairperson:	Toni Floyd
Field Trips:	Melissa Takagi
Parliamentarian:	Chris Toft
Shop Coordinator:	Alan Mazzola
Program Chair	<b>vacant</b>
Show Chair	Michele Shepard
Newsletter Editor	<b>Carol Hiestand</b>
Website:	Ian Burney
Membership Chair	Lori Goodman

## STANDING COMMITTEES (APPOINTED)

Facebook Page Coord	Jeff Fox
Ways & Means	Dawn Wright
Historian	Barbara Bury
Hospitality & Good Cheer	Judy Jessup
Meeting Displays	Barbara Bury
Picnic Coordinator	Moni Waiblinger
Refreshments	Dawn Wright
Redwood Rep	Barbara Bury
Librarian	Chris Toft
Calendar	Justin Engelmeyer

**NEXT MEETING:**

**WEDS APRIL 17, 7 PM**

**DITTUS HALL, REDWOOD  
TERRACE**

**710 W. 13<sup>TH</sup> AVE. ESCONDIDO**

**PADDLE AUCTION!!!!**

**BRING FINGER FOODS!!!**

**HAPPY BIRTHDAY  
TO APRIL BIRTHDAY  
MEMBERS!!**

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## BIG THANKS TO:

Nancy Arthur-McGehee for  
her fascinating talk about  
Intaglios, and for bringing so  
many lovely examples to  
share with the club!



## IMPORTANT INFO FOR CLUB MEMBERS:

Show demonstrators can sell their custom product without the normal 20% fee to the club!

**Volunteers needed** for the gem show; please contact Michele Shepard to volunteer!

PGMC has a new cell phone, (760)743-0809 with a working voice mail. The **WIFI hot spot is in!** The shop & club will be able to take charges over \$10.00 in the future!!

**CONGRATULATIONS and MANY THANKS to our new VICE-PRESIDENT!**

At the February PGMC Board meeting, the Board unanimously voted to appoint **Justin Engelmeyer** to replace John Raabe, as our new Vice-President (per the PGMC by-laws). Justin graciously accepted the nomination. Many, many thanks to John Raabe for his many continuing years of service to our club!

## DEL MAR COUNTY FAIR

Open MAY 31- JULY 4  
(closed Mondays & Tuesdays in June)

ATTENTION ALL MEMBERS!

**FREE TICKETS for the SAN DIEGO COUNTY FAIR!!**

Each year, our club is asked to volunteer 2 hours at the INFO BOOTH / SANDBOX at the Gem and Mineral Exhibit at the San Diego County Fair in June. We will be volunteering the first week in June, due to preparations for our club show at the end of June.

So far the 6 slots on Wednesday, June, 5th are **all** taken.

The following 4 slots are still open, 2 volunteers each slot:

Friday, June 7<sup>th</sup>:

□ 11 AM to 1 PM

1 PM to 3 PM

Saturday, June, 8<sup>th</sup>:

3 PM to 5 PM

Sunday, June 9:

1 PM to 3 PM

Thanks to all members who volunteered at the March meeting!

Please contact Chris Toft at omphalos41@[gmail.com](mailto:omphalos41@gmail.com) or (760) 739-1826 ASAP to secure your spot.

## \*\*\*\*UPCOMING CLASSES\*\*\*\*

Lapidary & Silversmith Workshop

2120 W. Mission, Suite S., Escondido

### Cabochon/Lapidary Class & Open Workshops

**Tuesday** 6:30 – 9:30 pm

**Wednesday** 11:00 am – 2:00 pm

**Thursday** 2:00-5:00pm

Learn to cut and polish a rock into a beautiful stone suitable for wire wrapping or fabricating in

metal. A fantastic assortment of material is available for purchase on site.

The workshop is also open for general use. No prior registration needed.

**Thursday** 6:00 pm – 9:00 pm **METAL SMITHING only - open for to those students who have had metal smithing instruction or experience and/or have instructor approval.** *Those students who have attended an introductory class may continue to work on improving their skills in this weekly workshop.* An experienced metalsmith will be available for consultation.

**Cost:** A \$7 shop fee will be collected for regular workshop. Club membership required.



### Introduction to Faceting

An informative introduction and hands-on experience in the world of gem cutting. Learn how to

create a gem out of a piece of rough, during a weekend class. No machine required. Return

students welcome with or without their own machine. Each class can accommodate 3 new

students without machines and 3 returning students with their own machines.

**Instructor:** Bob Johnson

**Location:** Club Shop

**Dates & times:** Sat. April 13, and Sunday April 14, 2019 – 9am -5pm

**Cost:** \$80 New students. Club membership required. \$70 return students.

Contact Bob Johnson for more info or to register - 760-809-0152 or email Bob at [N78532@yahoo.com](mailto:N78532@yahoo.com)

### Faceting – Continuation Class

This is a class for continuing students who have completed the Introductory Class and is held once per month, from 9 to 5 on the Saturday following the general meeting, (which is always on the third Wed.)

**Instructor:** Bob Johnson

**Location:** Club Shop

**Cost:** \$35.

*April workshop – April 20, 2019, 9-5*

Contact Bob Johnson for approval and to reserve a spot - 760-809-0152 or email Bob [N78532@yahoo.com](mailto:N78532@yahoo.com)

## Lost Wax Casting

This is a 3-day class intended to introduce the student to the art of lost wax casting.

**Instructor:** John Raabe

**Location:** Club Shop

### Dates & times:

Wednesday, April 24, 2019 6-9 pm - **Introduction to Lost Wax Procedure**

Friday, April 26, 2019 6-9 pm – **Investment Procedures**

Saturday, April 27, 2019 – 1 pm - **Burnout & Casting Procedure**

**Cost:** \$100. All required material will be provided including one ounce of silver.

**Requirements:** Open only to club members. Class limited to 4 students.

Contact John Raabe by April 23<sup>rd</sup> at 760-749-2749 for more information or to register.

[If there is enough demand, this class may be offered monthly!](#)

**Introduction to Silversmithing Class *Note date change***



Ring by Mike Mettelka

This is a 10-hour introductory silversmith class. The students will learn to develop their designs, use a jeweler's saw to cut out a pattern, solder a bezel to a backing and add a bale or a ring shank, creating a wearable piece of jewelry. Intermediate students can work on a project of their choosing with instructor approval. At the completion of this introduction the student can continue learning in the Thursday night workshop.

**Instructors:** Diane Hall & Annie Heffner

**Dates & times:** July 27 & 28, 2019, 10-4

**Cost:** \$60 (club membership required - \$25 fee for single membership)

***Materials additional – (Approx. \$30) and please bring a cabochon to set in silver or let us know if you need one.***

**\*\*Call Diane Hall at (760) 741-0433 (leave message for call back) or email [dianehall213@gmail.com](mailto:dianehall213@gmail.com) for more info or to register. Next class September 28 & 29.**

## WORKSHOP HOURS:

INFO FOR NEWER MEMBERS:

Workshop open shops \$7.00/SESSION

OPEN SHOPS:

Tuesday 6:30-9:30 PM

Wednesday 11:00 AM-2:00 PM

Thursday 2:00-5:00 PM

METAL SMITHING (& GRINDING)

Thursday 6:00-9:00 PM

## Some funnies:

What did the cowboy chemist tell his horse?

HIO Ag!

According to a geologist, why is the world so diverse?

Because it's made up of alkynes of people.

What do you call a periodic table with gold missing?

Au revoir

What do you do with a dead geologist?

Barium

What did the boy volcano say to the girl volcano?

I lava you!

Why did the geologist take his girlfriend to the quarry?

He wanted to get a little boulder.

Why was the sedimentary rock extra cheap?

Because it was on shale.

Why are geologists good at comedy?

They know really "dirty" jokes!



## PGMC 65<sup>th</sup> Anniversary Celebration 3/20/19

## San Diego County Fair Announces Theme and Lineup for 2019

San Diego County Fair invites guests to skip down the yellow brick road and enter a world inspired by L. Frank Baum's Classic Tale, "The Wonderful Wizard of Oz."

There's no place like home, there's no place like home, "There's no place like the Fair." The 2019 San Diego County Fair announced their theme for next year's fair and it's going to be "Oz-some."

San Diego County Fair invites guests to skip down the yellow brick road and enter a world inspired by L. Frank Baum's Classic Tale, "The Wonderful Wizard of Oz."

The fair will officially [open to the public](#) at 4 p.m. on May 31, 2019, and will run through July 4, 2019. As usual, it will be closed Mondays and Tuesdays except for the last week of the fair.

In addition to the theme being announced, the Toyota Summer Concert Series line up was released. Musical artists like, "You

Look Like I Need A Drink" singer, Justin Moore, Grammy award winner "Smokey Robinson," Grammy-nominated, Mariachi Sol de Mexico, and popular Tejano act, Grupo Intocable will be on stage.

## INCIDENT AT THE CULVER BAER MINE (part 2)

I'm summoned to Geothermal Resources International's (GRI) Bakersfield office after finishing the Culver Baer Mercury Mine evaluation. There I learn about the company's latest get-rich-quick-scheme. For reasons that I've never been able to understand, small companies seem able to dream up very risky projects that they think will be exceedingly profitable. In my experience none ever came close to success. GRI's latest plan is to form a mining subsidiary to be called Geometals. They are not fazed by the fact that no one in the company, except their lowly young geologist, knows anything about the mining business. Their plan is to sell stock to the public and line their pockets. Mining will be at best a sideline to promoting stock sales. First, Geometals must obtain the Securities and Exchange Commission's approval to sell stock to the public. I learn the company has another mine in Nevada called Mercury Mountain Mine. The insiders' geologist buddy, good ole Joe, is evaluating the mine. Joe has men opening up this "rich" mercury mine. Geometals says that I will go to Washington D.C. and appear before the Securities and Exchange Commission to obtain approval for them to sell stock. I'm to explain and vouch for the merits of the Mercury Mountain and Culver Baer Mines. First, I must familiarize myself with the Mercury Mountain Mine before traveling to Washington.

A chartered plane flies me to the Mercury Mountain Mine. The pilot is Farley International Aviation's pilot/owner, Chuck Farley. It is called Farley International Aviation, because Chuck once flew a man to Baja Mexico. Chuck is familiar with the mine's location, because he routinely flies Joe to the mine. There is no airport near the mine and the procedure is for the plane to buzz the mine and land on a nearby dirt road. A truck from the mine drives out to meet the plane. Driving into the mine, I can see intense hydrothermal alteration has bleached the rock white and that is a good sign. About a dozen men are using heavy equipment to recklessly tear up the country. Joe is waiting at the "mine".

Several things become obvious. There is no evidence of mercury mineralization and therefore no reason to be

spending money at this property. There are three common mercury ore minerals. Most mercury deposits contain the mineral cinnabar, which is a bright red mineral. A few mercury deposits contain the mineral meta-cinnabar, which is a bright scarlet-red mineral in freshly broken rock, but meta-cinnabar quickly darkens to a black color when exposed to sunlight. The third mercury mineral is native mercury, which occurs as small liquid drops of shiny gray metallic mercury. All of these minerals would be easily seen in the mine's snow white altered rhyolite rock. Joe is unable to show me any mercury mineralization and he cannot explain why he is digging pits and trenches. Joe says he is "stockpiling ore". That is doubtful, because neither Joe nor I can find mercury minerals in this supposed stockpiled ore.

Throughout the day we discuss geology and in particular mercury ore's genesis and mode of occurrence. It is apparent Joe knows next to nothing about the geology of mercury deposits. He does continually mention being a "good friend" of the fools forming Geometals and tries to use this to bully me. The entire operation is a scam. What remains unknown is who is scamming whom? Is Geometals being scammed or is Geometals using this property to scam the public? I will never know.

My boss J.Q. is informed the Mercury Mountain property is worthless and Geometals should abandon the project. I tell J.Q. that I can't say anything favorable about Mercury Mountain to the Securities and Exchange Commission. J.Q. says do whatever is best to protect myself as he is about to retire and really doesn't care about Geometals.

The Geometals contingent travels to the Securities and Exchange Commission (SEC) meeting in Washington, D. C. Geometals' party includes men, who are supposed to know about the company and plan of operation. A mining engineer consultant has been hired to speak about the feasibility to open the mines, but he has never visited the properties nor is he familiar with them. He is essentially worthless. It seemed strange he would consult as an expert on properties he has never seen. Now older and wiser, I know that most highly paid consultants are hired to say whatever the

company wants them to say and technical knowledge is not necessary for rendering a predetermined favorable opinion. In 1969, I still have a lot to learn. There are two attorneys along for the ride. Geometals' president, a CPA, leads the group. That meeting took place 49 years ago, but I still recall the event clearly.

Prior to leaving Bakersfield, GRI and the Geometals' group are informed that I will tell the SEC the truth that the Mercury Mountain Mine is worthless. I don't grasp how crooked and corrupt these men really are. They apparently don't comprehend what telling the truth means. Probably because, like politicians, they live in a world where promoting, lies, and half-truths are standard business practice. They expect that young Gene will lie to keep his job.

The Securities and Exchange Commission meeting is with their mining expert, Benjamin Adelstein. The Geometals group enters his large office where he sits with his assistant, a man he introduces as Norman (*no last name*). One attorney begins to speak and is immediately interrupted by Mr. Adelstein, **"Exactly what is your function with this group?"** (Attorney) **"I'm an attorney representing Geometals."** (Adelstein) **"Then you're not an expert in the mining business and I'm not interested in anything you have to say."** Geometals' president begins to speak, **"I'm Geometal's president and a CPA ...."** (Adelstein) **"What is your background in the mining business? Have you worked on any mining projects or in the mining business before?"** (CPA) **"No."** (Adelstein) **"Then you keep quiet too and sit over there next to the attorney. Is there anyone in this group who knows anything about the mining business?"** I'm thinking, if he talks with the mining engineer, he will quickly find out the mining engineer has never seen these mines and we will all be thrown out on our fannies. (Gene) **"I'm a geologist familiar with the mining properties."** (Adelstein) **"Good, I will talk to a geologist. Geometals proposes to sell stock to the public as a mining company, but the firm's prospectus lists properties that are not mining properties. What can you tell me about the orange ranch in Modesto?"** (Gene) **"Until this moment, I have never heard of it."** (Adelstein) **"Do**

**you think a mining company has any business being in the orange growing business?"** (Gene) **"It seems strange to me."** (Adelstein) **"OK the orange ranch is out!"** With that statement, he draws a big black "X" across the orange ranch section in the prospectus. (Adelstein) **"What can you tell me about the Lake Tahoe housing development?"** (Gene) **"I never heard of it."** (Adelstein) **"That's out too. We are making good progress today Norman. Let's get to the mining properties. Which one do you want to talk about first?"** (Gene) **"Take your pick."** (Adelstein) **"What can you tell me about the Mercury Mountain Mine?"** (Gene) **"I only spent one day at the property, but in my opinion it is worthless and if you allow Geometals to sell stock in that mine then you will allow them to swindle widows and orphans."** (Adelstein) **"Norman, I have been sitting in this office for 27 years listening day after day to people telling me lies about their fabulous mining ventures and today, for the first time, an honest man walked into this office."** Geometals' attorneys and president now figure it is all over and I have killed any chance for selling stock. (Adelstein) **"Mercury Mountain is out, what is the truth about the Culver Baer Mine?"** (Gene) **"I have been evaluating that mine for months. The mine has a good history of production and is currently in production mining low-grade-open-pit ore. I believe the downward extension of the high-grade-main-ore-body was just missed by the mine's lowest underground workings. A short extension from those workings should encounter high-grade ore and greatly increase the mine's production and profits. I can explain it better if I can show you my maps."** (Adelstein) **"Come over here to the large table and roll out your maps. THE REST OF YOU STAY PUT!"** For the next hour, Adelstein and I discuss the mine's geology and my plan for exploration and development. Then Adelstein turns to the Geometals group and says, **"I will approve your application to go public only if you agree to throw everything out of your prospectus except the Culver Baer Mine."** Geometals' president quickly agrees and Mr. Adelstein says, **"Go back to your hotel and redraft the prospectus. I will give you the name of a secretary**

**you can hire to type up the new prospectus. Return to my office in two days with a revised prospectus."**

The Geometals boys spend their usual workday in the hotel's bar, while I rewrite the prospectus describing the merits of the Culver Baer Mine and a plan for exploration and development. We return to Mr. Adelstein's office where he reads the revised prospectus. He turns to me and says, **"You're too honest."** I look at him with a quizzical look as he continues, **"In the prospectus you describe how many holes you're going to drill, where they will be located, and how deep each hole will be drilled. Suppose as drilling starts, this area begins to look less attractive and this area over here is more attractive. What will you do?"** (Gene) **"I drill fewer holes here and expand the drilling pattern in this area."** (Adelstein) **"Exactly, that is what you will do, but the prospectus outlines a very specific program. Some disgruntled shareholder might decide to sue the company, because you didn't do exactly what the prospectus set out as the original program. You need to be vague. Just say the plan is to do extensive drilling in this area but don't spell out where each hole will be drilled. Keep everything vague. Go back to California and send me a revised prospectus and it will be approved."**

Within a few weeks the final prospectus is approved. Geometals can now sell stock to the public. I attend one final meeting with Geometals' officers and directors. Their plan is that I will operate the mine for two years as mine manager. Eighty percent of the mine's earnings are to go into the pockets of Geometals' insiders, with nothing for the shareholders. The mine's remaining twenty percent of earnings is to cover operating expenses and wages. That is of course unrealistic. My duties and responsibility will be greatly increased, but my salary will remain at its present low level. I will not receive any stock or a bonus for opening the mine. In two years, the mine is to be fully operational and then I'm to step down as mine manager and remain as mine geologist. Geometals' president's unemployed brother-in-law will then become mine manager. Geometals has access to an endless supply of inept relatives and Bakersfield

cronies. I never had the opportunity to turn down this "wonderful" offer. The Geometals group can never agree to the percentage of cash each insider will receive from the company's earnings. The pie is just not big enough to satiate each man's greed. This leads to infighting among the group's founders and Geometals never sells stock. The Geometals Company fades into oblivion.

The Culver Baer Mine continues to operate for several more years until the subleasing operator, Tony Manfredi, runs out of ore. Geothermal Resources International (GRI) loses interest in the mining business and they renew Tony's sublease. With GRI's approval, I lead Tony to a rich ore pocket across the county road from the mine. Greedy Tony doesn't reward my kindness.

A year later, I stop at the mine on a hot summer day. Tony asks, **"Would you like a beer?"** Handing over a cold beer, Tony says, **"That will be 25 cents"**. In one year, Tony has personally made more than one million dollars profit from the ore-pocket that I showed him and now he wants 25 cents for a beer. I pay the 25 cents and we sit there talking. The rich ore pocket is nearly exhausted and Tony wants to know where there is more ore. (Gene) **"My 25-cent beer is empty and I need to get going to catch a plane."** From his expression, I knew Tony got the message about the expensive beer he just sold. What Tony never knew was there was ore right below where we were sitting while I drank the 25-cent beer. A few years later, the U. S. Geological Survey published my paper on the Culver Baer Mine as part of a Professional Paper. Unable to find more ore, Tony closed the mine and retired to enjoy the charms of his young trophy wife.

## THE RATTLESNAKE MINE

The Rattlesnake Mine adjoins the Culver Baer Mine and both are located on the same mercury deposit. In 1975 Betty and I start our consulting business and our first client is Rollins Securities Corporation. Rollins Securities is a New York firm preparing to raise capital to develop geothermal energy on the Rattlesnake Mine property near The Geysers Steam Field's reservoir. Rollins Securities is working with the mine's owner,

Dunsen Power, Inc. In the initial telephone conversation, Mr. Rollins is informed the Rattlesnake property is probably located outside The Geysers' geothermal reservoir. It is therefore likely that my report will be negative and perhaps he should hire another consultant. Rollins says he needs a true evaluation and if it is negative, then Rollins Securities will not proceed further with the project. I'm to contact Dunsen Power's president, Dr. Richard Phelps, who will provide the property information.

I meet Dr. Phelps at his home in an exclusive high-rise apartment building. Dr. Phelps is an older man and his daughter is present. During the meeting, the daughter is being attentive and constantly doing things as if her father is handicapped. He stands up and says, **"Let's go to lunch"** as his daughter grabs his arm. Once we are outside, she asks the doorman to bring their car around. The car is the usual promoter's big Cadillac. Dr. Phelps gets in the driver's seat and his daughter says, **"Have a nice lunch dad."** Dr. Phelps drives down the driveway and out onto the highway where we barely avoid an accident with oncoming traffic. This highway has stoplights at each main intersection and he drives right through the first red light. He drives through every red light intersection as horns are blowing and cars are stopping and swerving to avoid hitting us. I'm about to say something, when he says, **"Watch on the right and you will see a savings bank and just after the bank there will be a shopping center with a low hedge around the parking lot. Tell me when we first get to the hedge."** In a few moments, I see the bank and the adjoining parking lot. (Gene) **"We are driving past the hedge."** He turns the Cadillac to the right and the car bounces up onto the sidewalk and through the hedge into the parking lot where he stops the car. He doesn't pull into a parking space, he just stops in the parking lot's middle. (Dr. Phelps) **"Do you see a restaurant?"** (Gene) **"Yes it's a short distance in front of the car."** (Dr. Phelps) **"Good, get out and help me walk over to the restaurant."** Entering the restaurant I release Dr. Phelps's arm and he walks right into a wall. The manager knows Dr. Phelps and runs over to take his arm and guide us to a table. I now realize the man is blind. After lunch, he wants to drive, but the only way I will get in the car is if I

drive. At the apartment building the doorman looks at me rolling his eyes and shaking his head. I'm familiar with the Rattlesnake property, but they insist I visit the property before writing a report.

I fly to San Francisco, rent a car, and drive to the property. That visit confirms the Rattlesnake Mine is probably outside the geothermal reservoir. The report to Rollins Securities states there is insufficient acreage to support their proposed 55-megawatt power plant. I'm certain the Rattlesnake property is outside the geothermal reservoir and I state that opinion. Later drilling results prove the property is outside the reservoir. Mr. Rollins receives the report and asks for several changes. Some changes are cosmetic and can be made, but he insists the report has to state the property is inside the reservoir with a high probability to produce 55-megawatts of electric power. Rollins needs a positive report to raise investment money. I refuse to write a misleading report and he refuses to pay our invoice. For two years, we try to collect our fee and even hire a collection agency, but getting a hold on John Rollins is like trying to grab a greased snake. Our first consulting job results in a net loss for the expenses associated with the field visit and preparing the evaluation. I don't know if Rollins raised any money. No wells were ever drilled on the property.

A few years later, John Rollins is putting together another business venture in New York. Our client, Alexander "Sandy" Bowers, is president of the Stewart Capital Group, which John Rollins is trying to promote to finance his latest venture. Sandy knows about our experience with John Rollins. Another friend, also present at the meeting, told me the following story. (Sandy) **"Didn't Gene Ciancanelli do some consulting work for Rollins Securities?"** (John Rollins) **"Ciancanelli doesn't know what he is doing. We refused to pay for his work."** (Sandy) **"That's odd. He has done a lot of work for us and we've been pleased with his services. Frankly, I'm inclined to believe his explanation that you would not pay for his services because he would not write a dishonest report. We don't do business with dishonest people. This meeting is over."** John Rollins lost a multi-million dollar investment, which was a substantially more than he owed us.

Soon after, the Securities and Exchange Commission ordered "1) that the broker-dealer and investment adviser registrations of Rollins Securities Corporation (RSC) be revoked; 2) that RSC be expelled from membership in the National Association of Securities Dealers, Inc.; and 3) that petitioner Rollins be barred from association with any broker or dealer, provided that after two years, he may apply to the Commission to become so associated in a position which is not directly or indirectly connected with the making of markets in securities." As is usual with promoters, Rollins just reinvents himself. That ended my work at the Culver Baer and Rattlesnake Mines.

## Important info for field trips/campers

Contributed by Diane Hall; Thanks Diane!

## California Campfire Permit

Do you Camp or recreate on Public Lands in California?

Do you use a Campfire or Cookfire? (Even an open flame Propane Stove) Do you know to be legal you must have a valid California Campfire Permit in your possession?

Do you know where and how to get your Free "California Campfire Permit"?

Get Your 2019 California Campfire Permit Online

Visit [www.preventwildfireca.org/Campfire-Permit](http://www.preventwildfireca.org/Campfire-Permit)

Watch a short video-take a quiz-get your on-line permit

- save or print pdf or just bookmark the link on your mobile device to display when needed.

Do not get caught with a campfire without your Campfire Permit!

Did you know that the San Diego Natural History Museum has stunning objects from their mineralogy department displayed on every level of the Museum?

The Cerutti Mastadon Discovery continues through Dec 31 of this year; Fossil Mysteries and Skulls are always on view.

Go if you haven't already, and take the kids & grandkids!!!

## LARGE 552 - CARET DIAMOND FOUND IN NORTH AMERICA

Gene Ciancanelli

The 552-carat yellow diamond was found at Diavik Diamond Mine, northeast of Yellowknife in Canada's Northwest Territories.



The largest diamond ever found in North America is about the size of a chicken-egg. The diamond, measuring 33.74 mm x 54.56 mm, was discovered after passing through the initial screening process at Diavik's recovery plant. This diamond surpasses the previous record for a North American diamond. In 2015 a two billion-year-old 187.7-carat diamond named "Foxfire" was disclosed.

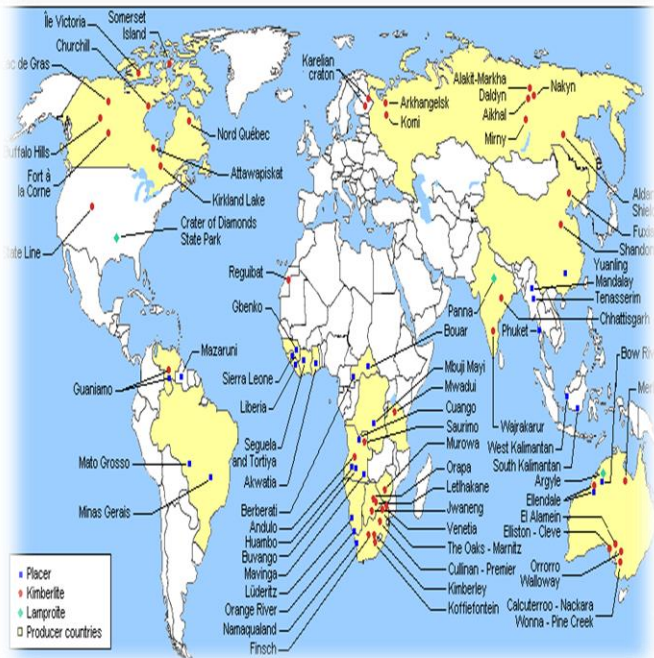
The largest diamond ever discovered was the 3,106-carat Cullinan, found in South Africa in 1905. It was cut into several stones, including the First Star of Africa and the Second Star of Africa, which are part of Britain's Crown Jewels.

Dominion Mines plans to cut and polish this rough diamond to increase its value. It has not yet known how much the stone will be worth after the process. "This incredible discovery showcases what is truly spectacular about Canadian diamonds," said Kyle Washington, Chairman of Dominion Diamond Mines. Canada is currently the world's 3<sup>rd</sup> largest producer of diamonds by value and the 2<sup>nd</sup> largest producer by volume. This is amazing because Canada's diamond fields were only discovered about 30 years ago. Two Canadian geologists Stewart Blusson and Charles Fipke followed glacial gravels sampling trace occurrences of minerals that are associated with diamonds in kimberlite pipes, which are the source rocks for diamonds. These associated trace minerals include low calcium garnets, chromite, ilmenite, clinopyroxene, olivine, and zircon. Detailed sampling of the rare occurrences of these trace minerals across large areas of Canada led Blusson and Fipke back to the diamond deposits in the Northwest Territories. As Ice Age glaciers moved south across Canada and into the northern U.S.A., the glaciers picked up the trace minerals and an occasional diamond as the glaciers scoured across the tops of the kimberlite pipes. The quantity of trace minerals are highest close to the diamond deposits and they diminished with increasing distance from the kimberlite pipes. Once zeroed into a potential diamond producing area, geophysical methods help to pinpoint the precise locations of kimberlite pipes.

Worldwide diamonds are found in kimberlite volcanic pipes most of which formed during the Precambrian Archean about 2.5 billion years ago. Rocks of that age form the craton centers of continents. The large diamond producing localities of Russia, central and southern Africa, Australia, and Canada all contain potential diamond host rocks. Diamonds have also been found and mined in Brazil, which prior to the opening of the Atlantic Ocean, was attached to the rich African diamond producing localities. South America

remains a prime locality for the discovery of future diamond deposits.

World Wide Diamondiferous Deposits



## FOLKS, WE STILL NEED A PROGRAM CHAIR!!!

IT'S NOT THAT HARD, AND A BUNCH OF FOLKS CAN SHARE THE RESPONSIBILITY!

WE ALL KNOW PEOPLE WHO KNOW PEOPLE WHO KNOW PEOPLE, SO USE THAT TO THE CLUB'S ADVANTAGE!!

THERE ARE UNLIMITED POSSIBILITIES, ALMOST EVERYTHING IS RELATED TO ROCKS!!

IF YOU WON'T BE A CHAIR, AT LEAST TALK TO FOLKS WHO ARE KNOWLEDGABLE THAT MIGHT BE WILLING TO DO A PRESENTATION FOR THE CLUB!

PREVIOUSLY I GOT A NATIONAL PARK RANGER TO GIVE A TALK ON THE GEOLOGY OF JOSHUA TREE NATIONAL PARK, AND AN AMERICAN INDIAN TO TALK ABOUT THEIR INFLUENCE AND CULTURE IN THE AREA. ANOTHER MAN TALKED ABOUT PETROGLYPHS AND THEN SOMEONE IN THE CLUB LED A HIKE THROUGH HIS "BACKYARD", WHICH WAS 10 ACRES FULL OF UNDISTURBED PETROGYLPHS!

## 1. dia·mond

[ˈdī(ə)mənd]

NOUN

**diamonds** (plural noun)

1. a precious stone consisting of a clear and colorless crystalline form of pure carbon, the hardest naturally occurring substance.  
synonyms:

[diamond](#) · [precious stone](#) ·

[\[more\]](#)

[jewel](#)

- a tool with a small diamond for cutting glass.
- 2. a figure with four straight sides of equal length forming two opposite acute angles and two opposite obtuse angles; a rhombus.  
"decorative diamond shapes"

synonyms:

[rhombus](#) · diamond shape ·

[\[more\]](#)

[diamond](#)

- (diamonds)  
one of the four suits in a conventional deck of playing cards, denoted by a red diamond.
- a playing card of the suit of diamonds.  
"she led a losing diamond"
- the area delimited by the four bases of a baseball field, forming a square shape.
- a baseball field.

ORIGIN

Middle English: from Old French diamant, from medieval Latin diamas, diamant-, variant of Latin adamans ( see adamant).

Translate diamond to

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2.

## Diamond Uses and Meaning | Crystal Vaults

<https://www.crystalvaults.com/crystal-encyclopedia/diamond>



Introduction to the **Meaning** and Uses of Diamond. Perfect in structure, Diamond is referred to as the "king of gems," unique in its powers of light reflection and dispersion, and the hardest natural substance known. Composed of pure ...

3.

## Diamond Meaning, Powers and History - JewelsForMe.com

<https://www.jewelsforme.com/diamond-meaning>



The **Meaning** and History of Diamond. It is believed that the first **diamonds** were discovered in India, at least 3000 years ago, but more likely as long as 6000 years ago. In Ancient India, people viewed diamonds as religious icons.

4.

## Diamond | Definition of Diamond by Merriam-Webster

<https://www.merriam-webster.com/dictionary/diamond>

Definition of diamond. 1 a : native crystalline carbon that is the hardest known mineral, that is usually nearly colorless, that when transparent and free from flaws is highly valued as a precious stone, and that is used industrially especially ...

5.

## Diamond | Define Diamond at Dictionary.com

<https://www.dictionary.com/browse/diamond>

a card of the suit bearing such figures. diamonds, (used with a singular or plural verb) the suit so marked: Diamonds is trump. Diamonds are trump. Baseball. the space enclosed by home plate and the three bases; infield. the ...

6.

## Diamond - definition of diamond by The Free Dictionary

<https://www.thefreedictionary.com/diamond>

diamond - a transparent piece of diamond that has been cut and polished and is valued as a precious gem. jewel, precious stone, gem - a precious or semiprecious stone incorporated into a piece of jewelry. sparkler, ice - ...

7.

## spiritual meaning of diamond | nataliakuna

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The Crystal: Diamond. As a symbol of unity and commitment, the diamond represents love, romance, trust and everlasting togetherness. Diamonds reflect all the colours of the rainbow, which in turn represent the 7 main chakras. Diamonds ...

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## DIAMOND | meaning in the Cambridge English Dictionary

<https://dictionary.cambridge.org/dictionary/english/diamond>

diamond definition: 1. a transparent, extremely hard precious stone that is used in jewellery, and in industry for cutting hard things: 2. jewellery made from diamonds: 3. a shape with four straight sides of equal length, forming ...

9.

## Diamond - Wikipedia

<https://en.wikipedia.org/wiki/Diamond>



Jump to navigation Jump to search. Diamond is a solid form of carbon with a diamond cubic crystal structure. At ...

- **Crystal class:** Hexoctahedral (m3m), [H-M symbol:](#) (4/m 3 2/m)
  - **Crystal habit:** [Octahedral](#)
  - **Crystal system:** [Cubic](#)
- 10.



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Diamond Symbol **Meaning**. The diamond symbol, triangle symbol and similar motifs that form a construction of other (more complex) symbolic designs occur in every era, culture, religion and esoteric sect. Overwhelmingly, the diamond symbol ...

- **biblical** meaning of diamond
- meaning of diamond **stone**
- meaning of diamond **symbol**
- **spiritual** meaning of **blue** diamond
- diamond **symbolism**
- **jack** of diamonds meaning

## 11. See results for

○

Diamond

- Diamond is a solid form of the element carbon with its atoms arranged in a crystal structure called diamond cubic. At room temperature ...

## DIAMOND: APRIL BIRTHSTONE

## ENHANCEMENTS

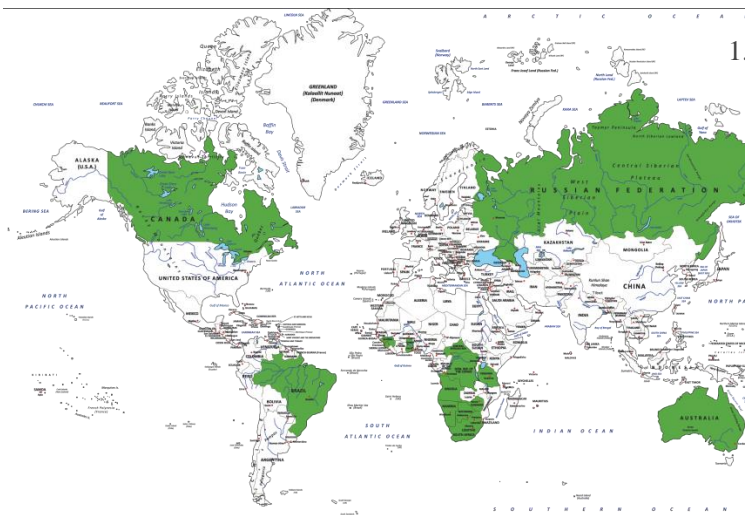
When buying a diamond, it is important to understand the range of enhancements a stone may have undergone.

While colorless diamonds are the most popular, diamonds are found in a variety of naturally-occurring and enhanced hues. Extreme heat and irradiation are widely used permanent treatments that enhance certain color properties. Black diamonds, for example, are usually enhanced in this way.



## HISTORY

Perhaps the world's best-known gemstone, diamond's purity and brilliance has been celebrated since ancient times.



1.



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10.

## Urban Dictionary: Diamond

<https://www.urbandictionary.com/define.php?term=Diamond>  
d

Diamond. She is the baddest thing walking, and dressing in the latest fashion is a must. She is sassy, sexy, classy, and has a bit of an attitude, but she is a humble woman also. No other can top her, she is the real deal. She has a banging ...

## 11. Related searches

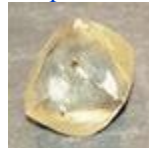
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Diamond

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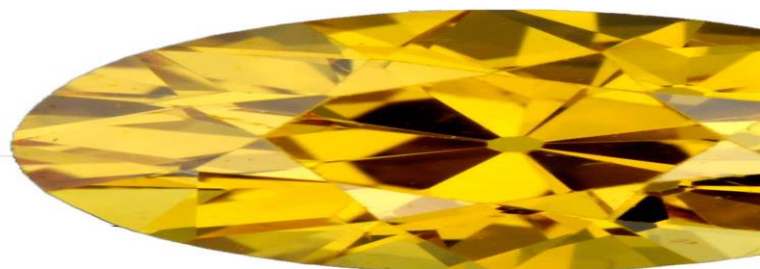




## SELECTING A STONE

Today, laser treatment is an increasingly popular diamond enhancement. Using powerful laser technology, lapidaries can vaporize the stone's internal imperfections and seal any cavities or fissures, rendering them nearly imperceptible to the naked eye. This treatment is permanent; only extreme heat or specifically formulated chemicals can compromise the laser sealant.

A new high-pressure, high-temperature treatment known as HPHT can improve the color of some diamonds. It can both intensify a diamond's existing pink, blue, green, and yellow color, or make a stone more colorless. Because HPHT diamonds sell for less than untreated diamonds, HPHT-treated stones must be identified with an inscription on the diamond's girdle to prevent misrepresentation.



DIAMOND PROPERTIES AT A GLANCE	
Family	
Chemistry	C
Refractive Index	2.417 - 2.419
Birefringence	.000
Specific Gravity	3.5 - 3.53
Hardness	10 (Moh's Scale)
Color Range	Colorless, yellow, brown, rarely green, blue, reddish, orange black

