



**PRESENTS**  
**ALL ABOUT OPAL**  
**WEDNESDAY,**  
**OCTOBER 20<sup>TH</sup>, 2021**



# HISTORY

- Name evolved from the Roman word “Opalus”
- Opalus means “change of color”
- Queen Victoria was a fan of opals
- There are two broad classes of opal: precious and common. Precious opal displays play-of-color, common opal does not
- With an eternal kaleidoscope of fiery color the opal is one of the most appealing and fascinating gems in the world





# FORMATION

- Formation of opal spans across centuries
- For hundreds of years, rainwater creates tiny silica which clings to sandstone or ironstone
- The water flushes these particles down into the cracks of the earth's surface
- As the water evaporates, it leaves behind dried silica. Over hundreds of years, the silica grows into a rough specimen
- Finally, when light hits the gemstone, fiery rainbow colors flash across the gem. This is known as play of color





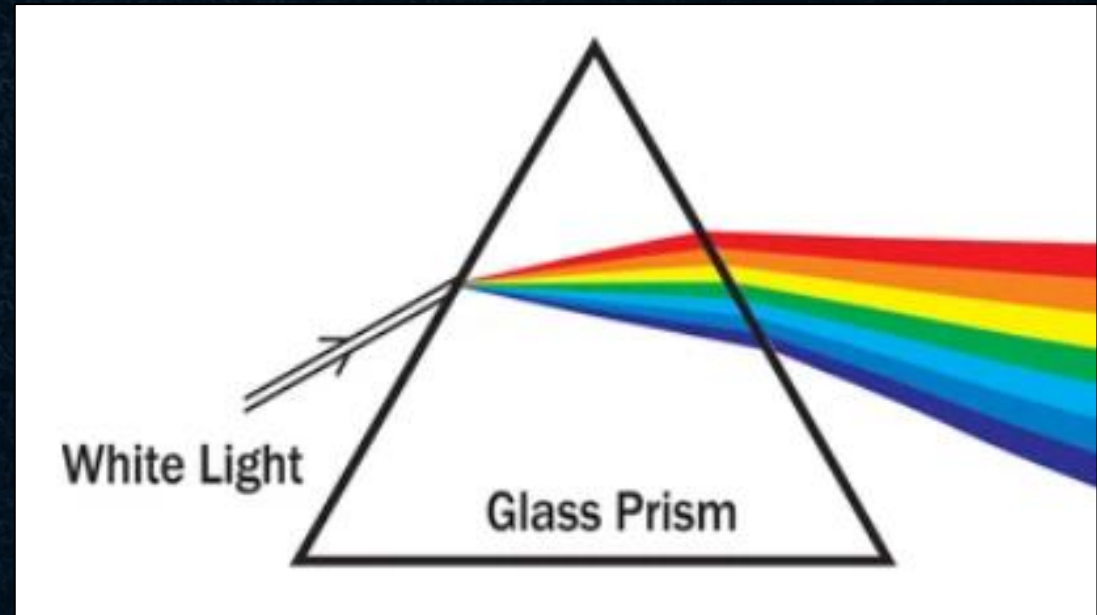
# FACTS ABOUT OPAL



- Opal is a hydrated amorphous form of silica; it consists of water
- Opal differs from other gems as it is formed from amorphous lumps of silica rather than that from naturally faceted crystals.
- Opal is known for its unique display of flashing rainbow colors called play-of-color
- No two Opals are alike
- Opal's hardness is 5.5 to 6 on the Mohs scale
- Opal is a birthstone for those who are born in October
- 18th & 34th wedding anniversary stone

# PLAY OF COLOR

- "Precious opal" is the name used for any Opal that exhibits "play-of-color", Play-of-color is the familiar flash of bright colorful light that a person sees when viewing opal
- Black opal, white opal, crystal opal, boulder opal, and matrix opal are all varieties of "precious opal"
- Play-of-color is an optical phenomenon that occurs when light enters an opal, interacts with its internal structure, and leaves the opal in a flash of spectral colors
- White light enters an opal, interacts with the tiny silica spheres that make up its internal structure, is diffracted into its component colors, and exits the opal in a flash of spectral colors





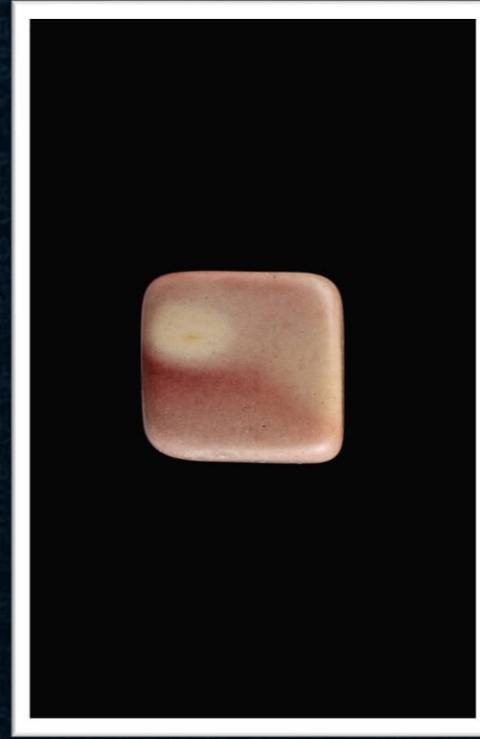
# TYPES OF OPAL



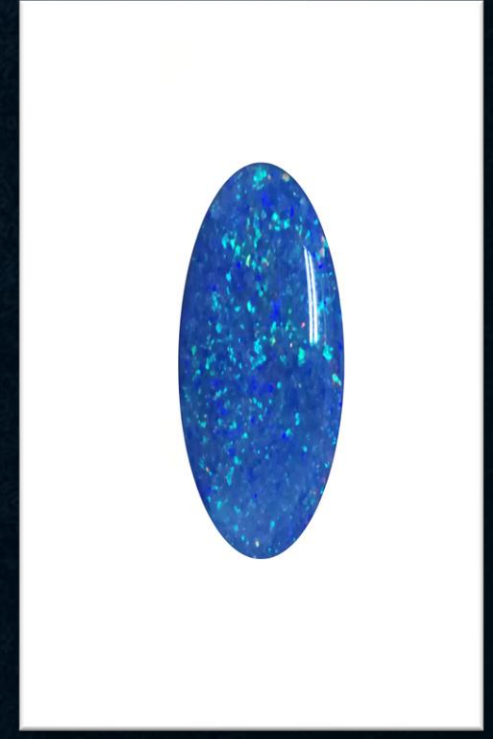
**POTCH (COMMON) OPAL**



**OPAL**



**DYED OPAL**



**ASSEMBLED OPAL**

# POTCH (COMMON) OPAL

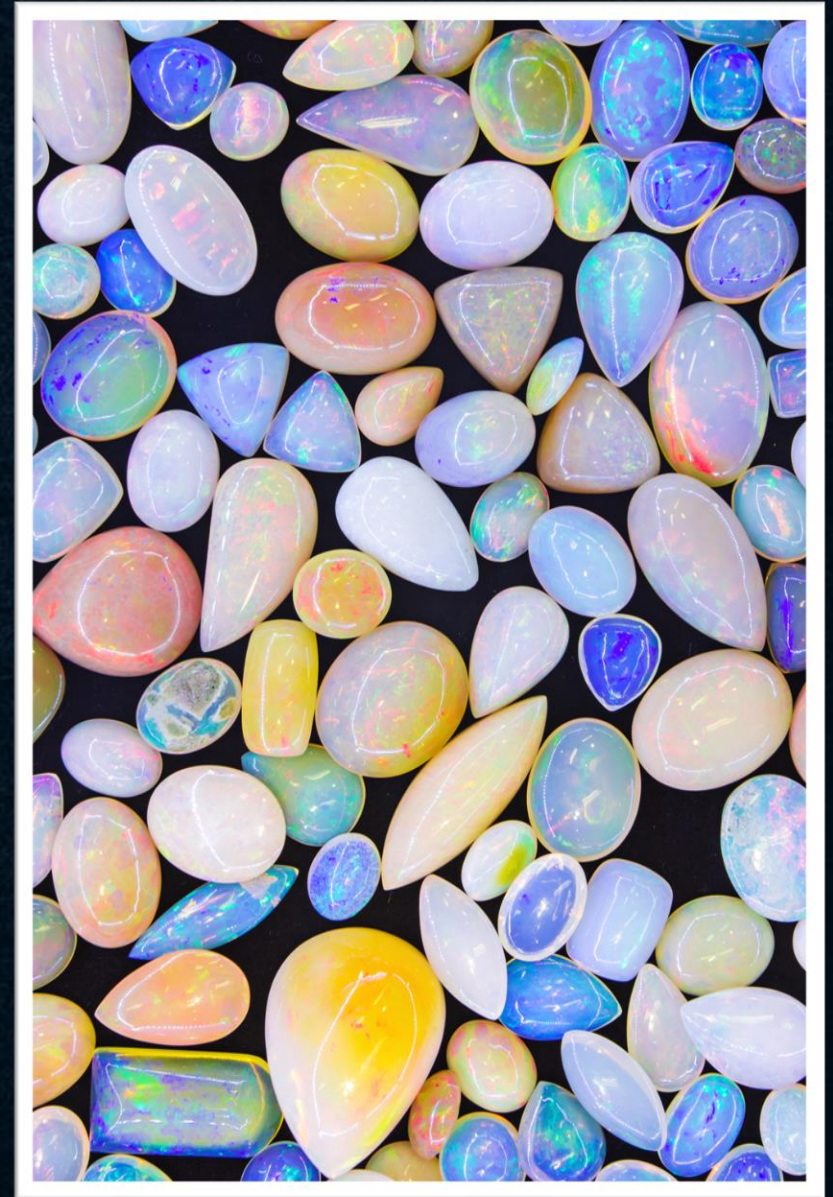
- Potch Is the opal that shows no play of color
- Even if they have some, it is minimal
- The majority of common opal mined is called Potch, so it is basically common opal with very little or no play of color
- Potch is structurally similar to precious opal but has a disorderly arrangement of silica spheres
- Example of potch opal is Pink, Peach and White opals





# DYED OPAL

- The use of coloring matter to improve the color by darkening the original color or to improve color
- Opals' porosity makes them good candidates for dye, smoke, and sugar/acid treatments
- Dyed treatment opals should be handled with care. Exposing the stone to day light may negatively impact the color.





# FIRE OPAL

- **Origin- Mexico**
- **Treatment- Natural**
- **The name “fire opal” is all about the body color - fiery yellow, fiery orange or fiery red. It's not about “flash”**
- **It is a variety of opal that has a bright yellow, bright orange or bright red background color**
- **Three color ranges of fire opal Salamanca ,Crimson, Cherry**





# ASSEMBLED OPAL

- **Some opal is cut from solid pieces of rough, but when only small or thin pieces of rough are available, assembled stones are sometimes made**
- **An "opal doublet" consists of a thin slice of precious opal glued to a solid base (often made of black Onyx)**
- **An "opal triplet" consists of a thin slice of precious opal glued to a black base, and covered by gluing a cap of clear quartz atop of the opal**
- **We use Boulder opal for doublet and triplet**



# MINING

- All types of opals come from different places like China, Australia, Tanzania, Norway, Mexico, Ethiopia, Brazil
- Australia has become the world's primary source of opal since the 1880's as it produces roughly 95% of the world's precious opal, including black opal
- **Modern Mining Methods:**
  - It usually involves advanced equipment such as clawed drills for shaft digging and tunneling machines or front-end loaders for horizontal tunneling
  - Automatic bucket tippers or gigantic pipe vacuums transport the mullock excavated by machine
  - This soil is then either transported to a drum mounted on a truck to be emptied later or shot out by the vacuum into a pile close to the shaft



# OPAL ROUGH



The asymmetric  
nature of rough of  
opals



# CARE

- Since opals are neither a hard nor tough stone, they should be treated with care. A few tips:
  - Remove your opal jewelry before playing sports, gardening, household cleaning and bathing
  - Opal jewelry should be cleaned gently with mild detergent in warm water and a soft toothbrush or cloth
  - Avoid bleach, chemicals and cleaners
  - Doublets & triplets may be wiped with a damp soft cloth and mild detergent, but should never be soaked or immersed
  - Opals have a 6–10 % water content and, like many other gems, will “dry out” and form cracks if they are subjected to extended dry storage. If you need to store your Opal for an extended length of time, just place it in a padded cloth bag and dampen the cloth before storing it for protection



## HOW TO CARE FOR OPAL JEWELRY





# OPAL FAVORITES ON SHOP LC\*



3844406 - LUXORO 10K Yellow Gold Premium Crimson Fire Opal and Zircon Ring (Size 7.0) 1.00 ctw



3846274 - Ethiopian Welo Opal and Zircon Halo Ring in Vermeil Yellow Gold Over Sterling Silver (Size 7.0) 1.15 ctw



3643425 - 10.25 ctw Ethiopian Welo Opal Tennis Bracelet in Platinum Over Sterling Silver (8.00 In) 12.75 Grams



3851724 - Australian Boulder Opal Triplet and Multi Gemstone Floral Spray Pendant Necklace 20 Inches in Platinum Over



3847193 - Ethiopian Welo Opal and Zircon Earrings in Platinum Over Sterling Silver 1.20 ctw



3749713 - Oregon Peach Opal and Zircon and Diamond Ring in Platinum Over Sterling Silver (Size 7.0) 10.30 ctw



3868095 - AAAA Ethiopian Welo Opal (Ovl 18x13 mm) 8.00 ctw



6252380 - AAA Mexican Fire Opal (Ovl 8x6 mm) 0.82 ctw

\*Items may not be available