

HUI PŌHAKU 'O HAWAI'I

Rock & Mineral Society of Hawai'i, Inc.



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LEAD MINERALS

BY DEAN SAKABE

Native Lead is very rare. Lead is mostly found and mined in the Lead Sulfide mineral known as Galena. The early Romans smelted lead, calling the refined metal Plumbum. Lead's low melting temperature, corrosion resistance, and malleability led the Romans to use it for plumbing. Today, lead is used in lead-acid batteries and radiation barriers. The Lead used in the production of leaded crystal is less than 3% of the mined output of Lead.

Lead was one of the early semiconductors. Back 60 or so years ago small galena crystals were used to make Oatmeal Box Radios. You might need to find someone of appropriate age to find out about these. A small crystal (most likely Galena), copper wire, a pair of headphones, along with the Quaker oatmeal box gave you an AM radio. Today instead of the crystal, a little diode will suffice. A quick web search will give you plans or kits to build a modern version of these radios.

Galena (Lead Sulfide) is a easy mineral for collectors. It's characteristic cubic structure and high density make it easy to identify. Coincidentally, Galena has the same crystal structure of Halite (NaCl), including the same symmetry and cleavage. Galena may also contain 1% or more of silver. Therefore the large volume of Galena processing also produces a significant amount of Silver by product or in

especially silver rich Galena, Galena instead of a ore of Lead, it can be considered an ore of Silver. Galena is found in the tri-state area of Kansas, Missouri, and Oklahoma. Additionally it is found in England, Germany, Italy and Mexico.

Cerussite (Lead Coarbonate) named from the Latin derivative of Cerussa, meaning "White Lead". Cerussite is found in the upper oxidized zone of Lead-Silver Ore deposits. Cerussite can be White, Grey, and colorless.

Anglesite (Lead Sulfate) is named after the locality that it was found. Pary's Mine on the island of Anglesey in Wales, UK. Anglesite can be white to colorless with thick tabular crystals.



Lead
Langban, Filipstad, Varmland, Sweden

MEETING

Wednesday

May 27

7:00—9:00 pm

Makiki District

Park

Administration

Building

NEXT MONTH

Cadmium,

Mercury, and

Arsenic Minerals

LAPIDARY

Every Thursday

7pm-9pm

Second-floor Arts

and Crafts Bldg

Makiki District

Park

MEMBERSHIP

COSTS

2008

Single: \$10.00

Family: \$15.00

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Dundasite (Hydrated Lead Aluminum Carbonate), is named after the locality was found in Dundas, Tasmania, Australia. Dundasite is normally found in white to colorless sprays of needle-like crystals. Dundasite is usually found as a secondary lead mineral.

Pyromorphite (Lead Chlorophosphate), named in 1813 from the Greek for "Fire" and "Form", because after it is melted into a globule, a sample began to take on a crystalline shape during cooling. Pyromorphite is a secondary lead mineral found in the oxidation zones of lead deposits. It is typically green to yellowish with barrel-shaped hexagonal prisms, in clusters on matrix.

Mimetite (Lead Chloro-arsenate), named in 1835 from the Greek word for "Imitator", which is an allusion to its resemblance to Pyromorphite. Mimetite is a secondary mineral found in the oxidized zones of lead deposits. Mimetite is usually found as small hexagonal prisms, with a color ranging from pale yellow, to yellowish-brown, yellowish-orange, orange-red, greenish, white and colorless.



Mimetite
Challacollo, Iquique Province,
Tarapaca Region, Chile



Mimetite
Elura Mine, Booroondarra, Cobar, Robinson Co.,
New South Wales, Australia



Galena
Shaoguan Prefecture, Guangdong Province,
China



Cerussite
Daoping Mine, Gongcheng Co, Guilin Prefecture,
Guangxi Zhuang Region, China



Lead Stalactite
Kombat Mine, Namibia



Dundasite
Tsumeb mine, Tsumeb,
Namibia



Anglesite
Montevecchio Mine, Arbus,
Mendio Campidano Province,
Sardinia, Italy

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DOOR PRIZES

Please note that we have instituted door prize drawings at our monthly meetings. Because of Hawaii's gambling laws, these drawings cannot be conducted in the common "raffle" format where tickets are sold. Rather, each *paid* member attending the meeting will receive a drawing ticket upon request. A voluntary donation of \$1.00 is requested and encouraged. Drawings will be conducted at the end of the meeting with available prizes awarded in random order. You must be present to win. Please remember: if you win a prize, please bring one to the next meeting. This helps to keep our drawings going. Thank you.

WE HAVE A WEBSITE!

http://pohakugalore.net/Hui_pohaku/Hiu_pohaku_1.html

MAHALO TO MARKUS FOR HELPING US GET OUT OF THE ELECTRONIC STONE AGE!

Rock & Mineral Society of Hawai'i, Inc.

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The Rock & Mineral Society meets on the 4th Wednesday of each month (except for adjusted dates in November and December) at the Makiki District Park, 7:00 - 9:00 pm. Enter from Keeaumoku Street. Parking is free but limited.

The Newsletter is published monthly, some days prior to the meetings and is distributed in electronic format by email (Adobe Acrobat PDF file attachment). Printed copies are "snail" mailed to those who do not have email. The electronic format usually contains full-color images; the print version may be limited to B&W due to reproduction costs.

Any newsletter comments are appreciated, and can be sent to elise.thomasson@gmail.com

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