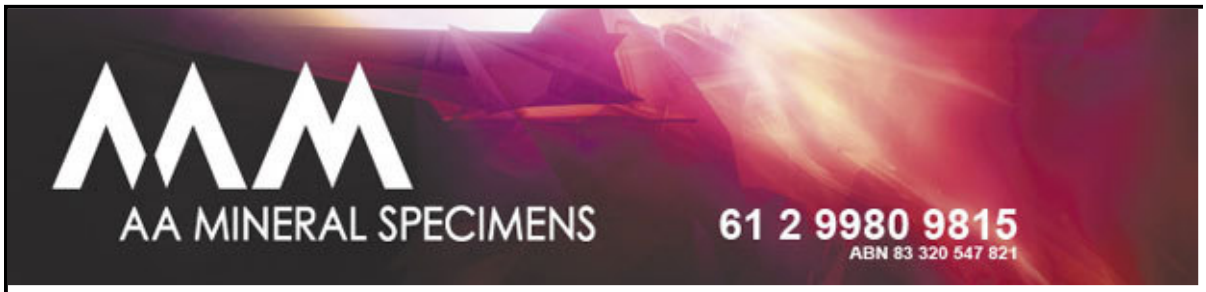
David Barthelmy

From: news@aamineralspecimens.com
Sent: Saturday, September 12, 2009 2:00 AM
To: dbarthelmy@webmineral.com
Subject: 12th September 2009 Newsletter



12 September

In This Issue

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Dear Dave Barthelmy,

We have a number of new specimens for your consideration th
We're particularly pleased that they come from a range of loca
including Minas Gerais, Morocco, Madagascar, Romania and a
of sites in the USA. The quality of these specimens is also very
which is always gratifying. We've been having a hard time dec
our favourites – our preferences seem change from day to day
ones do you like the best?

Bruce has been wanting to write about the Palabora Copper M
South Africa for some time now and so he's really happy to in
article in this issue. We hope you enjoy it.

All the best, and happy collecting,

Susan and Bruce.

NB: If you are having trouble displaying the images in this newsletter, you ma
click the 'display content' link at the top of your page. Also, adding our email
your address book will in many cases solve the problem. You can also view th
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Palabora Copper Mine

The Palabora deposit is not one of the world's best known sources of prized mineral specir
is however one of the more interesting and unusual copper producers.

The deposit is located about 360km north east of Pretoria the capital of South Africa. This
it close to the world famous Kruger National Park.

Although copper is the main product of this mine it also has substantial byproducts of nick

magnetite and vermiculite.

The lode is unusual in that it consists of carbonatite an igneous rock consisting of over 50% carbonate minerals.

This carbonatite forms a pipe shaped core of a larger igneous complex that was emplaced about 2.1 billion years ago into a series of high grade metamorphic Archean gneisses.

Ore minerals include magnetite, chalcopyrite, bornite, cubanite, pyrrhotite and other sulphides of copper, lead, cobalt and zinc. Apatite and vermiculite are also extracted along with uranothorianite and baddelyite (ZrO_2) with hafnium.

There is a huge stockpile of waste that contains significant amounts of rare earth elements that may in future prove to be economical to extract.

The ore was initially worked as an open cut but recently the mining has gone underground from the bottom of the pit.

What makes the Palabora deposit so interesting is the occurrence of an igneous carbonate rock with such common but still interesting pegmatoids, pyroxenites and serpentinites.

An interesting aside about modern carbonatites is that along the African Rift, molten carbonatites can be observed erupting rather sedately and resemble muddy hot springs. Although they are molten rock they do not glow. Leading to some unfortunate incidents involving observers getting painfully burned when getting a little to intimate with the presumed bubbling mud.

For those interested in mining history I suggest you research how Palabora was first located. It is a story combining high science and flukish serendipity.

New Stock

Apophyllite, Stilbite

Apophyllite, stilbite, Nasik, India.

Elbaite Tourmaline

Elbaite tourmaline, albite and muscovite.
Minas Gerais, Brazil.

Celestite

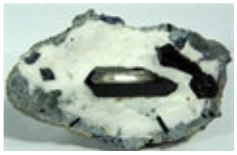
Celestite, Sakoany Mine, Vallee da la Sofia, Madagascar.

Azurite

Azurite, Mibladen, Morocco.

Rose Quartz

Rose Quartz, Laura da Ilha, Minas Gerais, Brazil.



Neptunite

Neptunite, benitoite, natrolite. San Benito County, California, USA.

Calcite & Marcasite

Calcite, marcasite. 1100 Level, Brushy Ck Mine, Missouri.

Barite

Barite crystals, Cavnic, Romania.

Rhodochrosite

Rhodochrosite, Cavnic, Romania.

Calcite

Calcite crystals, San Martin, Zacatecas, Mexico.

Apophyllite, Gyrolite, Prehnite

Apophyllite, gyrolite & prehnite, Bombay Quarry, Mumbai, India.

Benitoite

Benitoite, San Benito County, California, USA.

Aquamarine & Muscovite

Aquamarine & Muscovite, Sumire, Hunza, Pakistan.

Calcite crystals

Calcite crystals, Elmwood Mine, Tennessee, USA.

Danburite

Danburite, San Luis Potosis, Charcas, Mexico.

Itinerary

September
Sunday 20th September 2009
Bushland Shire Festival
(Hornsby Council)
Fagan Park, Arcadia Road
Galston (Sydney NSW)

October
Saturday 3rd to Monday 5th October 2009
Gemkhana
Recreation Area
Braidwood Rd, Goulburn NSW)