

## David Barthelmy

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**From:** news@aamineralspecimens.com  
**Sent:** Wednesday, July 08, 2009 7:37 PM  
**To:** dbarthelmy@webmineral.com  
**Subject:** Update 9th July 2009



Dear Dave Barthelmy

Many mineral collectors would be familiar with the role played by hydrothermal fluids and hot springs in the formation of deposits of collectable minerals.

A considerable number of our better known minerals have a hydrothermal origin with many of them having exceptional aesthetic appeal.

Over the last couple of decades hot springs have also become of great interest to biologists specially those studying the origins of life. The 'black smokers' of the deep ocean ridges have been found to be wellsprings of exotic life. Up until recently life was assumed by most workers to have originated on the earth's surface. With the discovery of unknown life forms and life-like forms in deep oil wells, the idea that life may also have begun in rock strata with hydrothermal fluids providing both energy and nutrients is gaining support.

The possibility of life or life remnants being discovered on Mars has been given impetus by the discovery of possible ancient springs in the Vernal Crater of that planet.

Go to our [Latest Update](#) to find out more details of this exciting discovery on Mars.

Cheers

Susan and Bruce