

Finding Caerulium

Jimmy stared at the strange rocks near his throbbing ankle as he lay in the cavern that had just opened up under his feet. Jimmy could see clearly, because the azure crystals scattered throughout the cave reflected a great deal of light. The entire cave seemed to glow in a soft blue light.

Jimmy managed to climb out and entice his parents with his vivid tale, verbally dragging them into the subterranean grotto. Their jaws did impersonations of subterraneans. Procuring a pouch, they chipped off several samples of this odd, blue, crystalline rock, and made haste towards their car.

Once home, Jimmy raced to his room to perform the test his science teacher had drilled into his head, day after day. He started by determining the luster of his little sample. "That's one shiny rock," proclaimed Jimmy. This crystal had a vitreous luster. When Jimmy scratched it along some porcelain, the substance left behind was bluish-white in color. After using the mineral to complete a circuit, Jimmy discovered it was a decent conductor. After he sample scored a 8.5 on the Mohs test, Jimmy was puzzled.

"It seems like quartz, except its way too hard" mused Jimmy. The mineral was not magnetic and had a density of about 3.35, denser than quartz. "This is confusing! I need some outside help," Jimmy concluded. The nearby high school had an electron microscope that could reveal the atomic structure. Jimmy placed a sample of his rock under the microscope. The results were astounding! Jimmy's rock was composed of Silicon, Aluminum, Iron, and Oxygen, with the complex formula of $\text{SiAl}_2\text{FeO}_5$, which seems a mix of quartz and some sapphires. Jimmy had stumbled across a new mineral! The science teacher was ecstatic and contacted his former professor, the famous mineralogist, Warren D. Huff.

Dr. Huff retested and couldn't find a match in any known mineral. Dr. Huff held a press conference to introduce the citizen and his discovery. The good doctor announced. "Jimmy Smith, will you please come to the microphone?" After a short pause, Jimmy came up to the podium and was asked, "How did you discover this strange crystal formation?" Jimmy replied, "I fell in a fissure while on vacation. I took some crystals for analysis because they were so shiny. I like shiny!" After the laughter subsided and Dr. Huff regained the drama of the moment, he trumpeted in a clarion voice, "Without any further ado, I introduce the world to Caerulium! Taken from the Latin word 'caeruleus' (meaning blue), this crystal is quite hard and conducts electricity. It is a fine balance between quartz and a sapphire." The discovery of Caerulium shows that anybody can contribute to the scientific community, even with minimal dignity.