



20 February 2018

Ref: Water Quality Report & Analysis

Attention: Sonnenstein GmbH

Cc: Mr. Paul Jakubczyk, Institut für Wasserforschung (IWF)

Dear Sir,

I have received the water analysis report prepared by SGS Institute Fresenius based on a sample taken from the private source in Pirna, Saxony, Germany. It is described as a spring with free-flowing discharge of 20,000 liters per hour (20 m³/hr or 90 gpm) at 3 bars of pressure. The water chemistry as analyzed does not correlate with that of other waters tested on the site or locally. The following are some comments from the perspective of earth-generated water, also referred to in the literature as: juvenile waters, plutonic water, paleo-water, volcanic or magmatic water, connate water, *aguas ancienes*... We prefer the term "primary water" produced by the "primary rocks" that are the source of our "primary minerals". These terms were common in the 19th century and have since fallen largely out of use.

The concept of Primary Water dates, in the modern period, to the work of Adolf Eric Nordenskjöld and his paper "About Drilling for Water in the Primary Rocks" (*"Om borrhningar efter vatten i urberget"*) published in 1896. Nordenskjöld was nominated for the Nobel Prize but died months before the first awards were made in 1901. Independently of Nordenskjöld, German immigrant to the United States, Stephan Riess, developed the theory of earth-generated primary water based on his work in mines across the U.S. Southwest. The book "New Water for A Thirsty World" by Michael Salzman was published in 1960, based largely on the many documented projects of Riess, and is considered the textbook on primary water by the many proponents worldwide of this theory.

The following statement by Riess remains the most succinct definition of primary water:

"At no time is water static. It is constantly changing form. It is either a liquid or gas, or it is bound up in crystalline form in rocks and minerals. The cycle of gas to liquid to crystal is repeated over and over. Oxygen and hydrogen combine under the electromechanical forces of the earth to form liquid water. Not only is water being constantly formed within the earth, but also rocks, minerals, and oil. What I seek is water in its liquid state."



The vicious politics of water in California succeeded in suppressing the wider acceptance of the concept of water being created within the Earth—in fact, the source water of our blue planet. However, recent advances in seismology, volcanology, mineralogy, geo-chemistry and planetary science have led to a series of discoveries, culminating in this 2017 headline:

“Planet Earth makes its own water from scratch deep in the mantle,” A. Coghlan, New Scientist, 27 January 2017, reviewing the scientific paper *“Formation and properties of water from quartz and hydrogen at high pressure and temperature,”* Z. Futera, et al., Earth and Planetary Science Letters, Vol. 461, 1 March 2017, pp. 54-60; this study in turn was confirmation of an initial study conducted in Japan: *“Formation of SiH₄ and H₂O by the dissolution of quartz in H₂ fluid under high pressure and temperature,”* A. Shinozaki, et al., American Mineralogist (2014) 99 (7): pp. 1265-1269.

Moving to a specific analysis of the Sonnenstein spring water from a primary water perspective, it must first be noted that earth-generated water does not, of course, have a single, replicable profile globally. The molecule H₂O transitions between the traditional three phases of gas (water vapor), liquid, and solid (ranging from ice to crystals in the bedrock of the continental crust). Typically created deep within the crust it rises mostly as vapor (*halitus*, as Georgii Agricola referred to it almost 500 years ago) which then is subjected to condensation to liquid as it cools—a similar process to warm breath exhaled against a cold window pane condensing from gas to liquid in front of our eyes. It is water in its liquid form that most interests us from a perspective of groundwater exploration with the aim to produce high quality wells for consumption and agricultural or industrial use. And this water is naturally affected, to a lesser or greater extent, by the geological formations through which it travels to the surface or into a borehole from which it is extracted.

Nevertheless, when captured in its most pristine form, either by well drilling or from a natural spring, there are many characteristics in common which can point to only an earth-generated source of this much sought-after natural resource. While these juvenile waters can range from parts per million (ppm) less than 100 to highly mineralized emanations like geysers and fumaroles, most springs and primary water wells yield a profile in the 250-500 ppm range, minerally balanced and slightly alkaline, potable without filtration. The Sonnenstein spring water reflects this profile. Furthermore, the Earth is negatively charged and thus water born in and emerging from greater depths can be expected to have a significant negative charge: a



redox value of -87 mV in this case. Taken together with the rH_2 value of 18, these are clear indicators of both energetic and antioxidant water. I suspect that the depleted oxygen (DO) would also tend toward the anoxic, although this sample should be captured as deep as possible to prevent atmospheric or even near-surface contamination. This leads us to what Dr. Gerald Pollack of the University of Washington has termed the fourth phase of water, or exclusionary zone (E-Z) water, which is essentially a crystalline form of H_2O creating an H_3O_2 lattice found throughout nature where water is in its healthiest state and capable of transmitting both energy and information among all living systems. These are concepts originally developed by Viktor Schauberger. Given that this water is said to produce beautiful crystals, it can be predicted that it will retain a significant amount of E-Z water.

The Sonnenstein water shows absolutely no surface or anthropogenic pollution, no tritium or other radioactive contamination. Modern hydrology and hydrogeology are unable to explain how such pure groundwater can exist in the same locale as a lower quality agricultural well, a mineralized spring or seep, or thermal waters of a different temperature and chemical profile. For this reason we propose the science of **geo-hydrology**—similar to geo-chemistry and geo-physics—to study the deep water sources of our planet. The solution to global water scarcity lies just beneath our feet, but only if we are prepared to re-orient ourselves from “looking up” for rainfall and following it to watersheds to water tables to unconsolidated aquifers, to “looking down” for the original source of water within the mantle and crust as it rises in faults, fissures and fracture zones toward the surface.

Sonnenstein spring water is without doubt Primary Water for, simply put, it cannot be explained otherwise! I wish you success as you develop this unique source for the benefit of your community and all who can enjoy its many beneficial properties.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Burr", written in a cursive style.

Mark Burr, CEO
Primary Water Technologies, LLC (USA)