

# Blue Hot Springs Project from Águas de Lyndóia, SP, Brazil.

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## Introduction

The Águas de Lyndóia (Brazil) bioclimate and water SPA town is recognized to settle the unique hot spring (27 °C) in São Paulo State (largest Brazilian GDP province), located on a particularly small mountain area with pleasantly smooth weather in this tropical latitude, such name meaning national bottled water market quality and containing naturally occurring local remedies (ESPA, 2004) recognized by a consistent archaeological and historical health benefits witness descriptions. Seeking prospect the greatest variety and richness of applications salutogênicas and sustainable activities, especially urban, this design work considers and analyzes potential resources agents as a case study in this kind of premium site network. Its components are assessed on physical-chemical, thermodynamic parameters of bioactivity (physiological, pharmacokinetics) and clinical tests with different forms of exposure. The springs, groundwaters and related healthy natural environments potential availed to the wellness or therapy salutogenesis applications; constitute good starting point for the use of land, especially urban. When obvious observed in cures, therapies or improvement of living conditions in chronic diseases, especially for dermatology (chronic wounds), urology (lithiasis) and pulmonology. Similar expected to this groundwater natural features occurrence, like: high discharge, mineralization (TDS) too low, relatively high presence of silicon, barium, boron, chromium, zinc, radon (<sup>222</sup>Rn) and thoron (<sup>220</sup>Rn); the latter two gases evolved in special microclimates in the sources. Being perhaps its most prominent the average content of dissolved oxygen (11 mg/l), almost in its natural concentration limit and responsible for their notorious bluish tint (Tozzi, 1956; Lazzerini, 2013).



Figure 1. Local history, testimonial and emanatorium.

Radioactive: dissolve kidney and gallstones; favor digestion; They are soothing and laxatives; filter excess fat from the blood.

Oligomineral: sanitize skin, diuresis, liver intoxication, uric acid, urinary tract inflammation, allergies and fatigue.

Table 1. Hydrochemistry comparisons.

Spring	TDS	°C/pH	(Bq/l)/O <sub>2</sub>	Si/B/Ba/Zn
Á.Lyndóia	75	27/7	96/11	5/0.03/0.2/0.02
BIOLEVE	107	22/7	45/8	4/0.01/0.1/0.03

Values mg/l

## Conclusion

The initial results show a community and tourists growing interests to know this place and focused project about SPA natural urban resources or environments. The policie and midia attention based on thermalism scientific view was notorious incremented during this job development period (10 months), resulting almost 50% visitation increment at this range time (15000 visits in 2013 to 25000 visits estimated in 2015).