

**Product:**

Aqua-Kat

**User:**

Hotel Reppert

User application report

**Adviser:**

Eckhard Ott

**Date:**

22.01.2004

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**Crystal analysis****Comparative study: Water quality****Evaluation**

Tested samples:

Umwelttechnik Ott (Ott Environmental Technologies), Water sample: Hotel Reppert 3 treated

As part of a comparative study for which altogether 3 samples were taken, of which 3 were evaluated here comparatively, the spagyric crystallizate that was obtained from the liquid phase and the solid phase of the samples was examined.

The crystals form in this case from the extraction of the distillation residue that was previously ashed and calcined. These crystal salts are combined with the distillate and applied to specimen slides. The liquid is evaporated at room temperature. During this process crystal images that are typical of the different samples are formed, which provide evidence of the quality of lifeforms in the samples.

Overview of the production process of the crystallizate:

1. Distillation of the sample at low temperatures without adding water or other solvents.
  2. Extraction of the crystal salt from the distillate residue through ashing and calcination.
  3. Combination of distillate and crystal salts and subsequent application onto specimen slides.
- Formation of the typical crystal images associated with the different samples -

The crystal images can at any time be reproduced from the same sample and always show the typical crystal images that are associated with each sample.

## Evaluation in tabular form

Sample of 17.12.03	1	2	3	4	5	OVERALL EVALUATION		
Umwelttechnik Ott Water sample of 17.12.03								
Examination of crystallizates: Hotel Reppert 3 treated								
<b>Overall picture</b>								
<b>Evaluation</b>	Formation	Shapes	Spread	Intensity	Total points	<b>Marks</b>	<b>Verdict</b>	
	<b>from +3 to -3 points</b>	<b>from +3 to -3 points</b>	<b>from +3 to -3 points</b>	<b>from +3 to -3 points</b>	<b>from +12 to -12 points</b>	<b>1 highest - 6 lowest</b>	<b>excellent to harmful</b>	
Hotel Reppert 3 treated	+1,5	+1,5	+ 1,0	+ 1,0	+ 5,0	<b>2,4</b>	<b>good</b>	
Hotel Reppert 2 treated	+ 1,0	+ 1,0	+ 0,5	+ 1,0	+ 3,5	<b>2,7</b>	<b>satisfactory to good</b>	
Hotel Reppert neutral	+ 1	+ 0,5	0	0	+ 1,5	<b>3,1</b>	<b>satisfactory</b>	
<b>Gesamt- bewertung</b>								
<b>Water sample Hotel Reppert 3 treated</b>	<p>Compared to the neutral sample and sample 2, a significant quality increase could be detected in the Reppert tap water after it was exposed to the Ott treatment device for 2 months. Both the technical quality and the bioavailability of the minerals showed a significant increase. This justifies the best marks overall in this series of tests, which indicates at the same time that the Ott device is also effective in the long term. To make any scientifically exact statement on this, however, more series of tests would be necessary. However, even this first test series shows highly positive results which leads us to the assumption that a further test series would also show positive results. We recommend the device for consumer use and mark it "good", because a significant increase in water quality was able to be achieved.</p>							

As part of a comparative study for which 3 samples from the same source but treated in different ways were taken (one every 4 weeks) the last one was taken on 17.12.2003. The sample consists of tap water from Hotel Reppert, that was filled into glass bottles and handed over to our laboratory by Ott Environmental Technologies. It was compared to the neutral sample and sample 2 that were taken 4 weeks earlier respectively. The 3<sup>rd</sup> sample was treated with a water treatment device by Ott. The aim of the test was to show the differences in the quality of the 3 samples and to prove thereby the effectiveness of the water treatment device. We are now looking at the evaluation of the last water sample which was subjected to long-term treatment with the Ott device. The exact treatment processes are unknown to us. Compared to sample 2 the number of 90° angular structures has decreased significantly. There are also hardly any visible 90° angular structures compared to the neutral sample, which would otherwise indicate a denatured water sample. A neutralisation of the quality-reducing factors that occurred in the neutral water due to artificial treatment could in this case clearly be detected..

This sample does not show any indication of direct pollution with chemicals, heavy metals or other environmental pollutants. Furthermore no pollution from radio-active or electromagnetic radiation can be detected. Pollutant information of this kind does not occur either. Compared to the other two samples, we are here dealing with the sample of the highest quality, because we can see widely branched out crystals that are close to a 60° angle as can frequently be seen with natural waters. The water clearly approached a nearly natural quality and is therefore far better than the neutral sample. The crystals are generally quite small, which indicates a good solubility of the minerals in water and promises good bioavailability of those minerals for the human organism. Even the treated 2<sup>nd</sup> sample did not show such a good bioavailability. In this respect, the biological water quality has clearly improved and the water has therefore become much more agreeable to the human organism.

The sample tested here shows considerably fewer 90° angular structures, which means that, compared to the neutral sample in particular, there is hardly any pollutant information present in this sample. The energy balance of the water could be significantly increased and therefore the treatment method used by Umwelttechnik Ott proved itself to be clearly effective.

A more detailed account of the test results will be given with the images.

# 1. Full image

40x enlarged

Sample: Umwelttechnik Ott, water sample: Hotel Reppert 3 treated

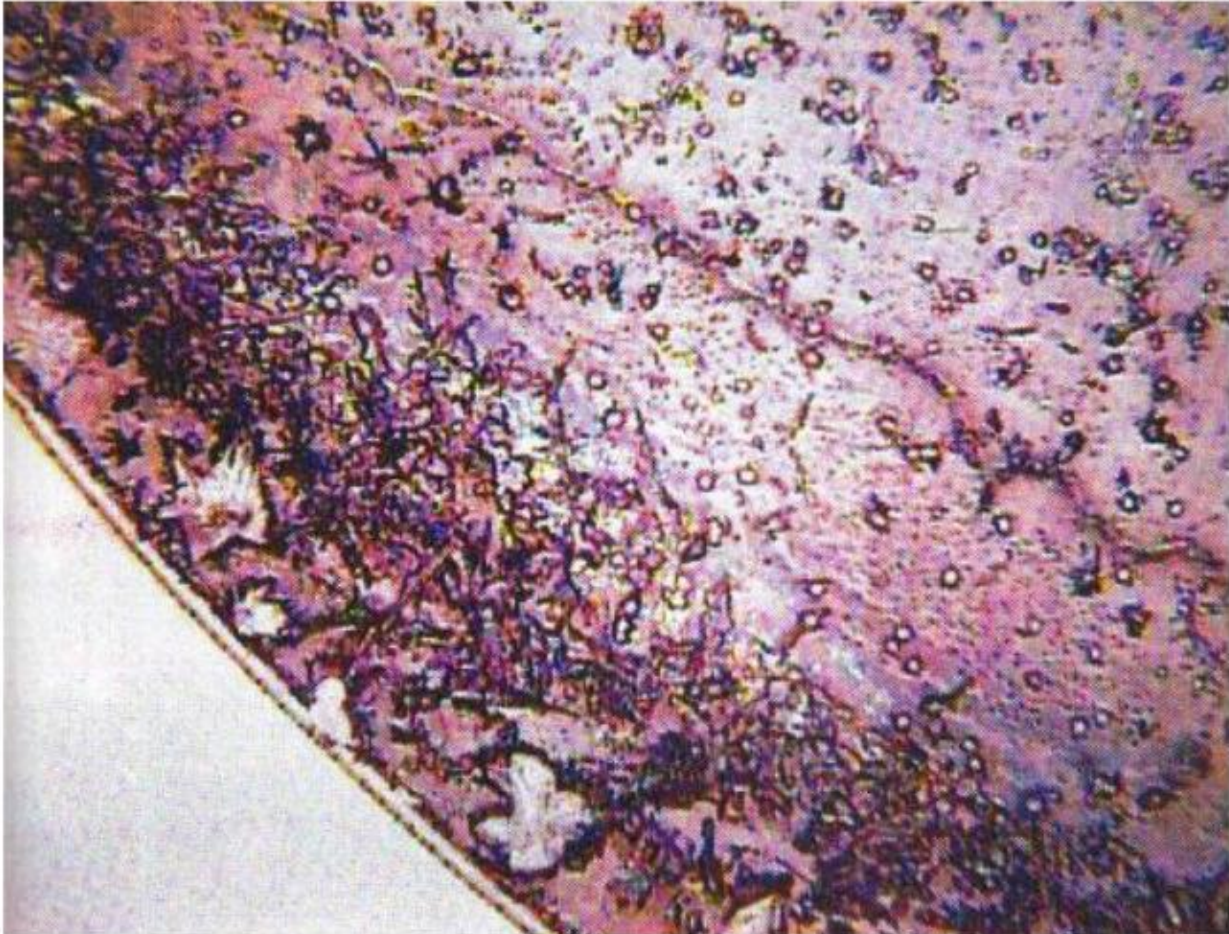


The full image shows relatively small crystals that occur particularly in the areas around the edges and indicate minerals of good bioavailability. The crystals that occur around the edges are by all means different from the ones in the neutral sample which indicates that the energy content of the water is much higher than was the case before the treatment by Umwelttechnik Ott. Overall, the quality has clearly been enhanced and more positive quality characteristics show up.

## 2. Half Image

100x enlarged

Sample: Umwelttechnik Ott, water sample: Hotel Reppert 3 treated



The relatively small crystals that indicate a good solubility in water are visible in the half image. Here it is also very apparent that the technical quality of the water sample was clearly able to be improved. The risk of limescale for technical devices could be significantly decreased, so that the water quality for day-to-day use can be rated much higher. The good solubility also leads to a more effective use and better integration of the trace elements by the human organism so that the water can now be considered a high-level foodstuff which was not the case with neutral sample. A slight increase can be noted even in comparison with sample 2.

### 3. Large Image

400x enlarged

Sample: Umwelttechnik Ott, water sample: Hotel Reppert 3 treated



The large image shows a fan-shaped crystal that is close to a star shape. The crystals are close to a 60° angular structure and therefore show a quality level that is very close to that found in natural spring water. Obviously a considerable increase in quality could be achieved in sample 3 that reflects the energy level of the entire sample, which is a very positive development. So the tap water quality could in this case clearly be moved close to that of natural water and the device has clearly shown its effectiveness with regard to biological quality. At the same time a tendency of long-term positive effects can be seen after a 2 month long exposure of the water to the device.

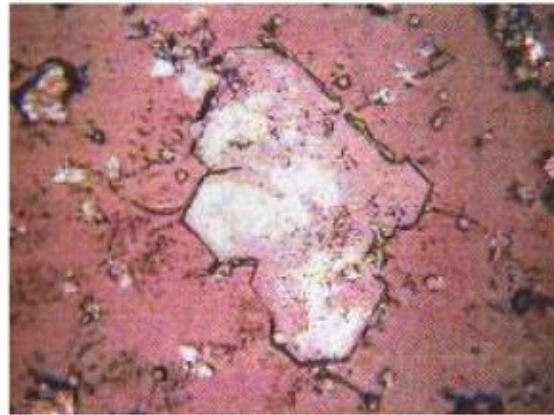
## Summary:

Sample: Umwelttechnik Ott, water sample: Hotel Reppert 3 treated

### Image comparison with neutral sample:



Sample: Hotel Reppert treated, 400x enlarged



Sample: neutral, 400x enlarged

A clear difference could be seen in comparison with the previous 2 samples from a technical point of view as well as in relation to the biological effectiveness of the sample. This difference means that the Ott water treatment device obviously has had a positive influence on the structure of the water. The cluster structures have been rearranged and show a significant increase in energy and a renaturation of the water sample that can only be of benefit to the consumer. Thus the Ott water treatment has been proven absolutely effective in a two-month test.

We grade the sample with 2.4 points and a result of good. The water treatment device thus shows an increase of 0.7 points which can be described as a clearly positive effectiveness. The device can therefore be used for the benefit of the customer.

To evaluate medical effects and to make more precise statements, further tests in relation to blood crystals would have to be carried out. Unfortunately this is not possible as part of this study.

Overall we grade the system Hotel Reppert 3 treated very good and give it a score of 2 on a scale from 1(excellent) to 6 (harmful). We thus certify a highly recommended quality, as is desirable for the consumer.

Ueberlingen, 22.01.2004

signed A. Schulz