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Analysis of Water Before and After Addition of Calcium Hypochlorite Solution – Wysiwash Sanitizer Unit U.S Patent no. 5,441,073

Full results of the analysis are given in the enclosed report. Should you require any further information on this or any other matter, please do not hesitate to contact this laboratory.

Yours sincerely

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Analysis of Water Before and After Addition of Calcium Hypochlorite Solution

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1. Introduction

Scientifics, Ltd. recorded the temperature, pH and Oxygen Reduction Potential of the water in the Wysiwash Sanitizer before and after addition of the hypochlorite tablet.

2. Observations

On the 24th of October 2007 the water was run through an empty Wysiwash Sanitizer unit that is without the calcium hypochrite tablet. This water was collected in bucket and the temperature, pH and Oxygen Reduction Potential recorded.

The second water run through the Wysiwash Sanitizer unit was with the calcium hypochrite tablet. This water was collected in bucket and the temperature, pH and Oxygen Reduction Potential recorded.

These runs where repeated again on the 24th of October 2007 and on the 25th of October 2007. On the 25th of October 2007 the chlorine level of the waters was also analysed.

3. Results

Full results of the analysis are given in table one.

4. Discussion

The Oxygen Reduction Potential of the water dispensed with the calcium hypochlorite tablet in the Wysiwash Sanitizer unit increases by over 100mv from the water dispensed through the empty Wysiwash Sanitizer unit.

The pH of the water dispensed with the calcium hypochlorite tablet in the Wysiwash Sanitizer unit increases by 0.3 of a pH unit from the water dispensed through the empty Wysiwash Sanitizer unit.

Free Available Chlorine analysis reveals an increase to 70ppm in the water dispensed with the calcium hypochlorite tablet in the Wysiwash Sanitizer unit from the water dispensed through the empty Wysiwash Sanitizer unit.

Table One: Readings Day One, Run One

Sample Description	Empty Wysiwash Sanitizer unit	Calcium hypochlorite tablet in the Wysiwash Sanitizer unit
Analysis Date	24/10/07	24/10/07
Sample Ref No.	SWW02636/1	SWW02636/2
pH	7.6	7.9
Oxygen-Reduction Potential (mV)	663	763
Temperature (°C)	19.1	14.3

Table Two: Readings Day One, Run Two

Sample Description	Empty Wysiwash Sanitizer unit	Calcium hypochlorite tablet in the Wysiwash Sanitizer unit
Analysis Date	24/10/07	24/10/07
Sample Ref No.	SWW02636/3	SWW02636/4
pH	7.6	7.9
Oxygen-Reduction Potential (mV)	653	772
Temperature (°C)	14.2	14.8

Table Three: Readings Day Two, Run One

Sample Description	Empty Wysiwash Sanitizer unit	Calcium hypochlorite tablet in the Wysiwash Sanitizer unit
Analysis Date	25/10/07	25/10/07
Sample Ref No.	SWW02636/5	SWW02636/6
pH	7.6	7.9
Oxygen-Reduction Potential (mV)	665	796
Temperature (°C)	16.1	13.9
Free Available Chlorine (ppm)	<0.5	70

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