# CREATIVE WATER SOLUTIONS

# Providing naturally pure, healthier water.

Industrial Water Treatment Newsletter - December 2018

### Use of ProMoss<sup>TM</sup> on a chiller

By: David R. Knighton MD, CWS Co-Founder, President and Chief Executive Officer

"Thank you for this great product."

Mike Bromley, Water Wis if America, New York, recently shared an email he received from the environmental engineer working at a Fortune 500 company he and Steve Chewning work cooperatively to provide ProMoss<sup>TM</sup> for their cooling towers and other water loops. Here are the details:

ProMoss<sup>TM</sup> was installed on their cooling towers one year ago. These towers provide cooling for manufacturing equipment and are crucial for continued production. They were previously treated with chemicals and service provided by Southeastern Laboratories and Steve Chewning. After successful use of ProMoss<sup>TM</sup> on another factory, they converted these four towers to ProMoss<sup>TM</sup> and stopped using the corrosion inhibitor and dispersant.



The event prompting their environmental engineer to send the message and photograph was the installation of a new chiller to replace the 30 year old chiller that was on the system. When they opened the chiller, they saw shining copper tubes with no scaling or corrosion.

The facility engineer at the facility wrote the environmental engineer, "We are replacing a 30 year old chiller that had been on Pro Moss for a year. I took a picture of the tubes on the condenser water side after it was removed. After one year of Pro Moss look at that copper tubing. Pretty good I would say."

The environmental engineer sent the picture and this statement to Mike Bromley at Water Wise:

"Just wanted to show you guys a picture of chiller tubes after ProMoss<sup>TM</sup> treatment. I am sure Steve has already seen these. Thanks for a great product!"

## Water Savings - Our firsthand experience with ProMoss<sup>TM</sup>

By: Rick Gallant, Aquatech of Florida, St Petersburg, FL.



### **System History**

200 ton cooling tower treated conventionally for over 20 years. No chiller or heat exchangers. Cooling water distributed to individual package units throughout 14 story building. 6" tower pipe branches off to 2" risers and then reduces to 1/2" condenser lines throughout building. Continual flow problems at ends of system condensers. Site base personnel continually chemically cleaning condensers at end of system's tower water supply. Put filming amine on line in Feb 2018. Added ProMoss<sup>TM</sup> to program in Sept. 2018.



Peterborough Apts. Senior Living Facility St. Petersburg, Fl.

## Water meter installed 10/16/18 System volume: 1600 gallons

Date of Service:					Daily
10/17/18	Reading	Prev.	Gal Used	DIP	Average
Make Up Meter:	3,784	0	3,784	1	3,784
Bleed Meter:			0	1	0
Test	Make Up	Cooling Tower		CC	
Conductivity	416	1283		3.1	
pH	7.84	8.91			
Total Hardness	148	532		3.6	
Calcium Hardness	140	480		3.4	
Total Alkalinity	172	380		2.2	
Chlorides	34	126		3.7	
Silica					
LSI				2.42	

#### **Added 4 Promoss<sup>™</sup> 3 10/22/18**

Date of Service:					Daily
10/22/18	Reading	Prev.	Gal Used	DIP	Average
Make Up Meter:	20,910	3,784	17,126	5	3,425
Bleed Meter:			0	5	0
Test	Make Up	Cooling Tower		СС	
Conductivity	418	1187		2.8	
pH	7.85	8.86			
Total Hardness	163	481		3.0	
Calcium Hardness	123	434		3.5	
Total Alkalinity	108	348		3.2	
Chlorides	34	114		3.4	
Silica					
LSI				2.29	

#### **Email sent to Maintenance Supervisor on November 13th, 2018 from Corporate Accounting:**

## 11/1/18: Maintenance Supervisor seeing a tremendous increase in flow at furthest end of condenser supply and return areas

Date of Service: 11/1/18	Reading	Prev.	Gal Used	DIP	Daily Average
Make Up Meter:	43,390	20,910	22,480	10	2,248
Bleed Meter:			0	7	0
Test	Make Up	Cooling Tower		СС	
Conductivity	438	1348		3.1	
pH	8.14	8.74			
Total Hardness	156	616		3.9	
Calcium Hardness	120	492		4.1	
Total Alkalinity	136	408		3.0	
Chlorides	32	126		3.9	
Silica					
LSI				2.29	

## Reduced daily average make up water usage by 80% since adding ProMoss™

Date of Service: 12/7/18	Reading	Prev.	Gal Used	DIP	Daily Average
Make Up Meter:	88,670	75,560	13,110	17	771
Bleed Meter:			0	6	0
Test	Make Up	Cooling Tower		CC	
Conductivity	490	1254		2.6	
pH	8.05	8.91			
Total Hardness	188	548		2.9	
Calcium Hardness	152	492		3.2	
Total Alkalinity	120	312		2.6	
Chlorides	36	128		3.6	
Silica					
LSI				2.35	

<sup>&</sup>quot;I love to see bills reduced, but this is unusual, the water consumption dropped from 257,300 to 120,700 in a single month. I saw a bill for a new water meter? Is this related to a reduced water consumption? I will need your thoughts for the financial explanation"