

### About the Site

Hines La Jolla Commons I is a 13 story, 300,00 square foot Class A commercial office building located at 4747 La Jolla Village Drive in La Jolla, California. For cooling, high-efficiency floor by floor water cooled, direct exchange (DX) AC units provide maximum flexibility, energy and cost efficiency compared to traditional central plant and heat pump cooling systems. They are cooled using reclaimed water.

### Problem Areas

Before Capture H<sub>2</sub>O took over their service, LJCI had several issues with their scale in their DX units, leading to unplanned shutdowns and frequent cleanings. They were unable to get good scale protection and were forced to run only 2 cycles, leading to significant sewer costs from blow down and high chemical usage.

### What Capture H<sub>2</sub>O Implemented

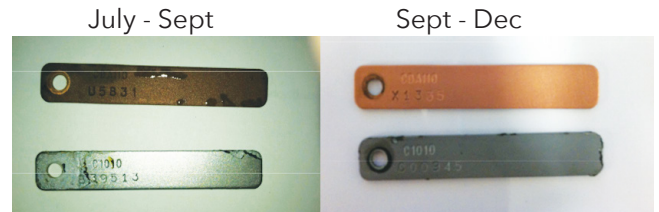
In order to eliminate unnecessary blow down costs and eliminate the need for chemicals, we installed the Zero Bleed System, combined with remote monitoring of conductivity, pH, softener regenerations, as well as water usage. We provided monthly service visits and a two hour training with the building engineers to familiarize them with the system and answer any questions before commissioning.

## The Results

### Water Usage Reductions

Daily Water Usage Reduction = 3,085 gallons  
 Yearly Water Usage Reduction = 1,126,160 gallons  
 Yearly Sewer Cost Savings = \$7,350

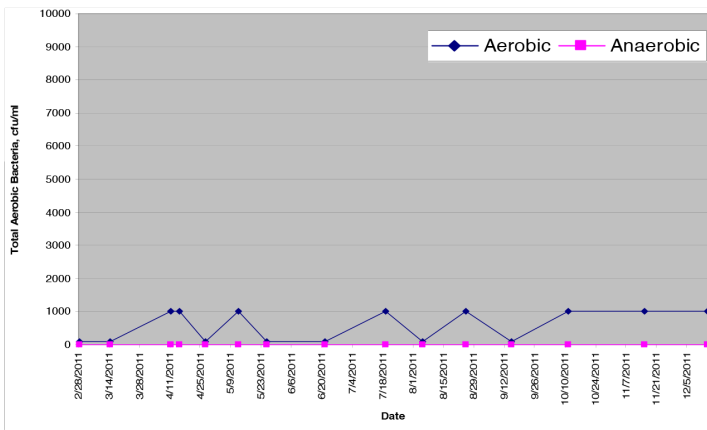
### Corrosion Results



July - Sept  
 Mild Steel: 0.79 mpy  
 Copper: 0.10 mpy

Sept - Dec  
 Mild Steel: 0.50 mpy  
 Copper: 0.13 mpy

### Bacteria Control



Anaerobic=0 cfu/ml  
 Aerobic=580 cfu/ml\*  
 \*<10,000 goal for good water treatment

NACE Industry Standards for Open Recirculating Cooling Water			
	Excellent	Good	Acceptable
Mild Steel:	<2.5 mpy	2.6-4.0 mpy	4.1-5.5 mpy
Yellow Metal:	<0.4 mpy	0.5-0.8 mpy	0.9-1.2 mpy

