

# DEL MAR GATEWAY COMMERCIAL OFFICE BUILDING



## OVERVIEW...

Del Mar Gateway is a 166,000 square foot office building owned by Prudential Financial and managed by Unire Real Estate Group. The cooling system currently in place consists of 500 tons of cooling, one cooling tower and two chillers. The owners were looking for solutions that would help reduce water waste while maintaining —or even improving —system efficiency.

## IMPLEMENTATION

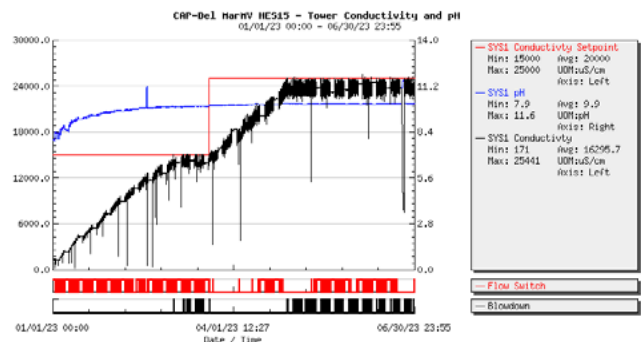
The building’s ownership team invested in two new chillers, installing them in fall of 2022. After a detergent cleaning and flush conducted by Capture H<sub>2</sub>O, the site was ready to employ the Capture H<sub>2</sub>O High Cycle Program which limits blowdown and concentrates the minerals in the cooling water.

Over a six month period (January 1, 2023 through June 30, 2023), Del Mar Gateway has:

- Increased tower conductivity from 1,356 uS to 25,000 uS.
- Increased cycles of concentration from 1.37 cycles of concentration to 25 cycles of concentration.
- Decreased blowdown from 72% (or 72 gallons for every 100 gallons of makeup) to less than 4% (or less than 4 gallons for every 100 gallons of make up).

Deploying the Capture H<sub>2</sub>O High Cycle Program with these new chillers has also led to improvements in equipment protection and health and safety.

Increasing the conductivity and the pH significantly in the cooling water created an environment that is inhospitable for bacteria growth. This protects the office tenants and facility employees from Legionella and other deadly bacteria.



# DEL MAR GATEWAY

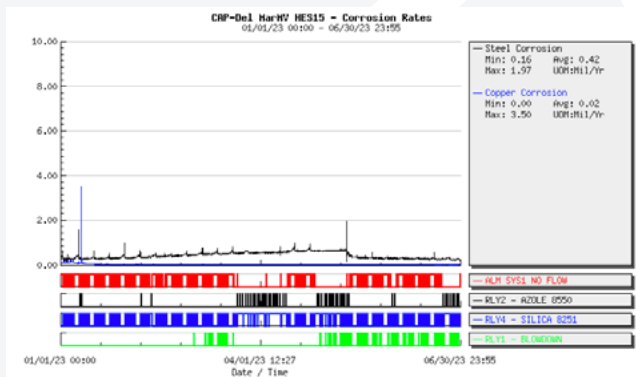
## IMPLEMENTATION CONT...

- This hostile-to-bacteria environment was created without a single biocide or bacteria-focused chemical. This solution makes the working conditions safer for employees while reducing operating costs.
- The Capture H<sub>2</sub>O High Cycle Program uses the naturally occurring mineral Silica (SiO<sub>4</sub>) to protect the equipment from corrosion. Since implementing this system, Del Mar Gateway has experienced world-class corrosion rates. The Capture H<sub>2</sub>O High Cycle Program at Del Mar Gateway uses dual alternating, high-efficiency softeners on the makeup line to the cooling tower.

Tower		
Date	ATP r/us	
1/10/23	8	200 max
2/6/23	0	200 max
3/6/23	8	200 max
4/10/23	0	200 max
5/10/23	0	200 max
6/2/23	0	200 max

## ATP TEST DATA SHOWS MINIMAL BACTERIA.

This approach removes hardness or the minerals that act as building blocks for scale. In the initial six months after installation of the Capture H<sub>2</sub>O High Cycle Program, the tower has had minimal hardness and zero visible scale.



Hardness trend at Del Mar Gateway during first 6 months



## SUMMARY...

Due to the forward-looking leadership team at Unire Real Estate Group, the Capture H<sub>2</sub>O High Cycle Program, and our expert team, Del Mar Gateway has reduced cooling water waste by 70% and provided high quality protection for the newly installed chillers.

“Working with Capture H<sub>2</sub>O has been a great experience. They provide a high level of service and sustainable options for water treatment that save water, reduce chemicals and make the work environment safer.”

- GEORGE TOOLE, CHIEF ENGINEER



**CAPTURE**  
H<sub>2</sub>O

Find out how Capture H<sub>2</sub>O can help your business shift to a more sustainable, cost-effective water treatment program at [captureh2o.com](http://captureh2o.com)

## HIGHLIGHTS

INCREASED CYCLES  
OF CONCENTRATION  
TO OVER

**25 CYCLES**

DECREASED  
BLOWDOWN TO UNDER

**4%**

**0.42 MILS/YR**

AVERAGE STEEL  
CORROSION

**0.02 MILS/YR**

AVERAGE COPPER  
CORROSION

**DECREASED**

CHEMICAL  
CONSUMPTION  
SIGNIFICANTLY