

Beecher Road School Closed Loop Water Testing Results

Pilot Program (1/21-4/21)

	pH* (8-11.5)	High Range Molybdate** (ppm as MoO ₄) (150-250)	Sodium Nitrite (ppm as NaNO ₂) (600 min)
Hot Water Loop (January)	6.75	0	80
Dual Temp Loop (January)	6.75	7.7	
Hot Water Loop (February)	9.35	65	200
Dual Temp Loop (February)	9.85	111	
Hot Water Loop (March)	9.75	123.5	320
Dual Temp Loop (March)	9.75	144	
Hot Water Loop (April)	10.25	255.5	360
Dual Temp Loop (April)	10.25	263	

*The **pH** scale ranges from 0 to 14, with 7 being neutral. pHs less than 7 are **acidic** while pHs greater than 7 are alkaline (basic).

In **water treatment, sodium **molybdate** (Na₂MoO₄) has proven to be a superior corrosion inhibitor in open recirculating cooling systems and closed recirculating cooling systems. It is often applied at lower levels and in combination with other inhibitors, such as inorganic and organic phosphates.

*****Sodium Nitrite** has been used as a corrosion inhibitor for closed loop **water** systems for many years. **Sodium Nitrite** functions a corrosion inhibitor in much the same manner as molybdate. As a corrosion inhibitor, **nitrite** works to form a protective gamma iron oxide film on the metal surface.