

## Marriot Koolina Reach Club

Location: Koolina, Hawaii

Trial Period: 30 days

**Trial goal:** Significantly reduce algae to a minimum in the water fixture at the hotel's main entry.

Note: The water fixture has a filtration system and most of the time have green (murky water), due to algae.



A P160 water conditioner was installed on a 6" PVC pipe, before the circulation pump.





## **Before and After Pictures**

Monitoring period 1: 5 days. May 12<sup>th</sup> - 16<sup>th</sup> 2011; water changed from murky to clear

**Monitoring period 2:** 5 days. May 16<sup>th</sup> - 23<sup>rd</sup> 2011; water remained very clear, and when maintenance crew walking on bottom of pond, water does not turn murky.

**Monitoring period 3:** 5 days. May 23<sup>rd</sup> - 31<sup>st</sup> 2011; water became even more clear (water quality is so clear it seems fish are floating in the air)



May 12, 2011



May 16, 2011



May 12, 2011



May 16, 2011







May 16, 2011

May 23, 2011





May 23, 2011

May 31, 2011

## Field Conclusion

Algae reduction: The algae reduced by over 90%.

Water clarity: The increased clarity was noticeable within 3 days.

Maintenance: The hotel completely stopped the use of UV lighting and algae treatment!

And is looking to reduce the use of back wash time and frequency of there 5 filters.

Estimated Return on Investment due to maintenance cost savings: 12 to 18 months.