

Supplementary Materials:

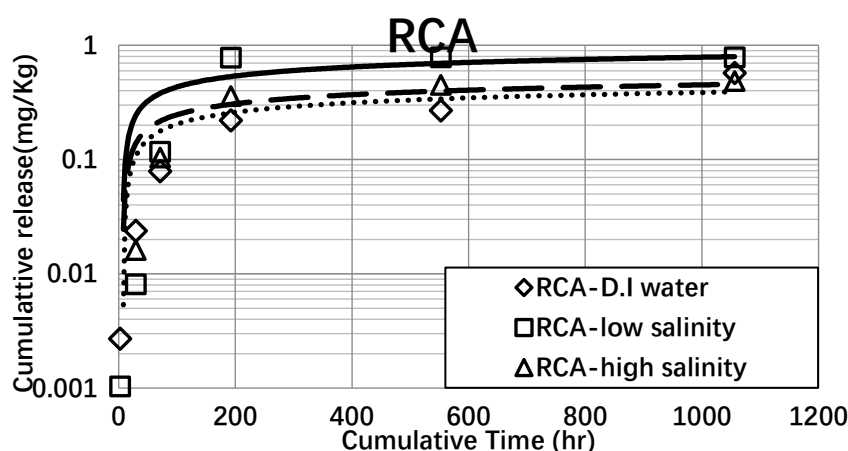
Recycled Concrete Aggregate for Oyster Aquaculture

Dong-Hee Kang ^{1,*}, James G. Hunter ¹ and Anastasia Chirnside ²

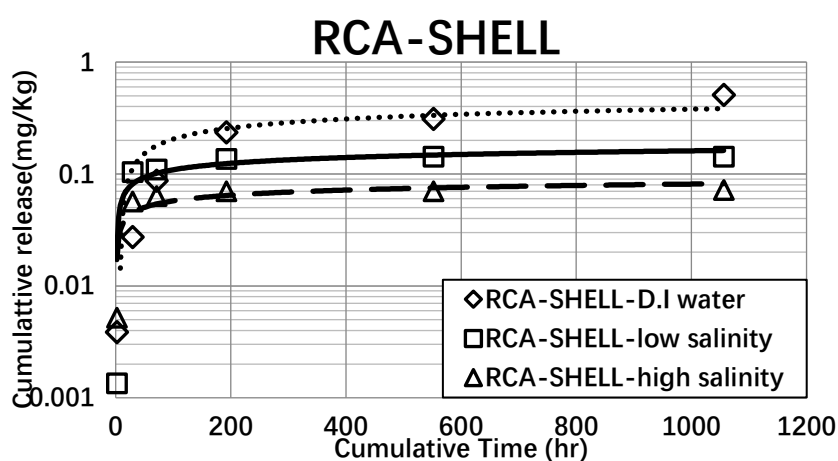
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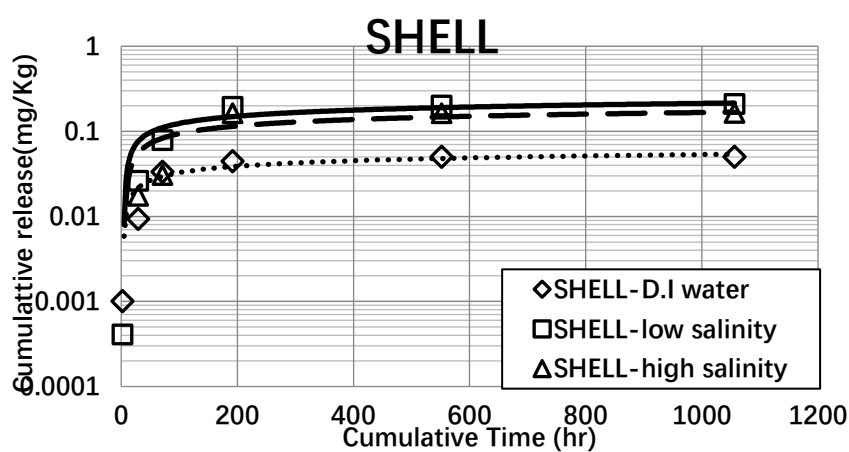
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(a)

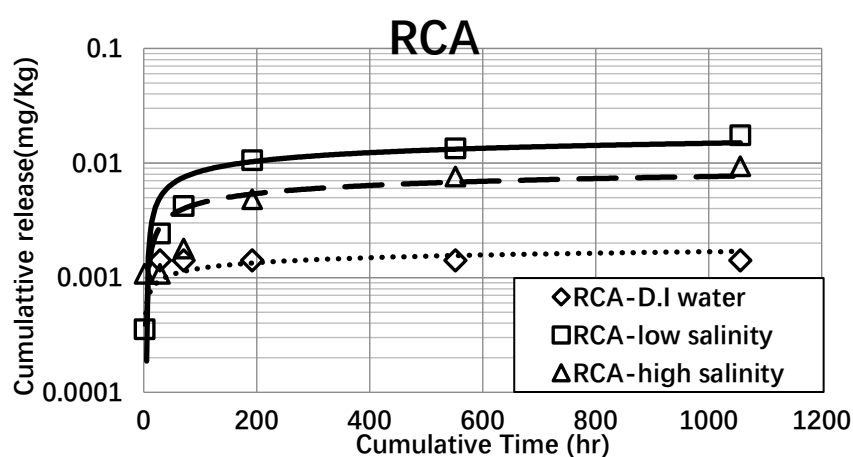


(b)

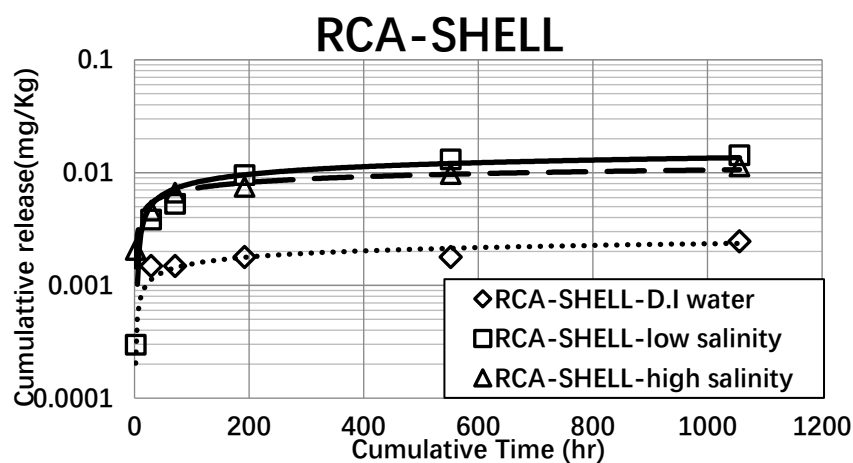


(c)

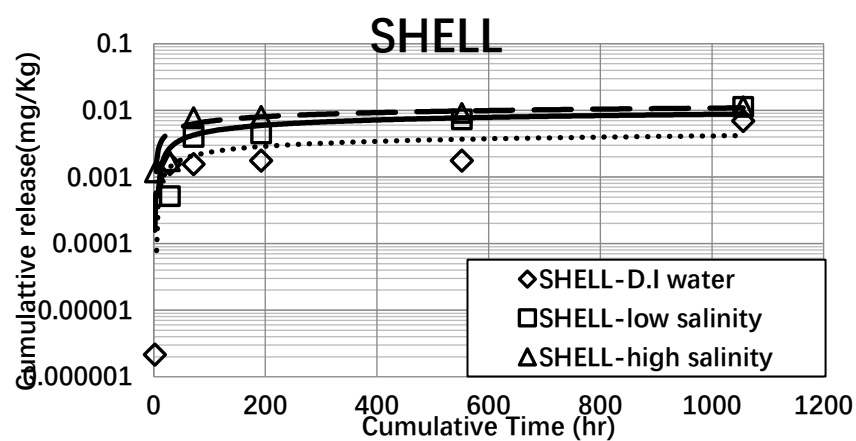
Figure S1. Cumulative mass release for aluminum by cumulative time from **a)** recycled concrete, **b)** recycled concrete with oyster shell, and **c)** oyster shell with different salinity.



(a)

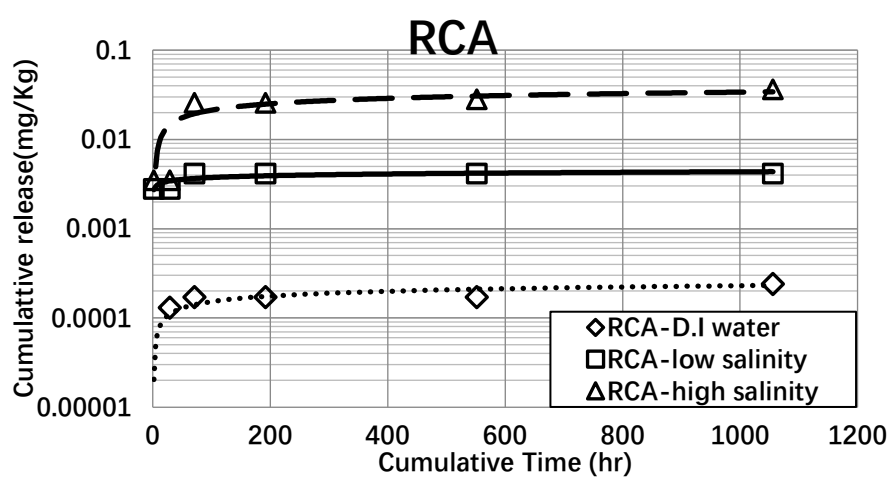


(b)

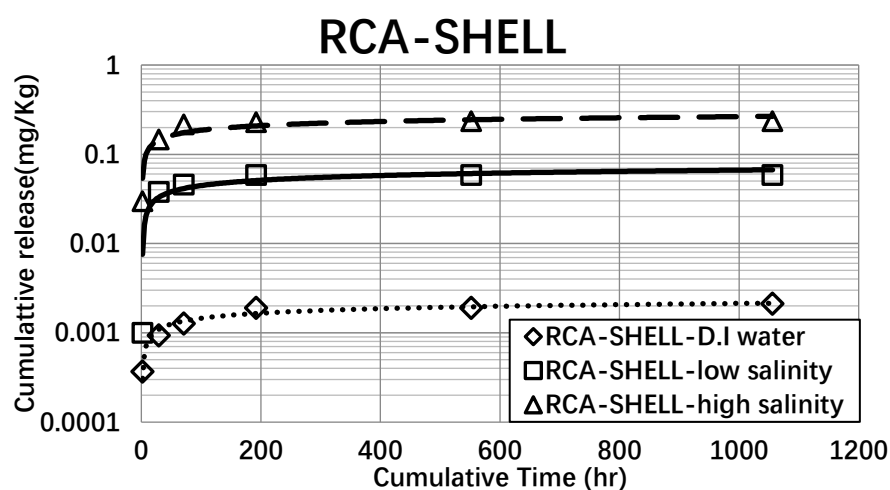


(c)

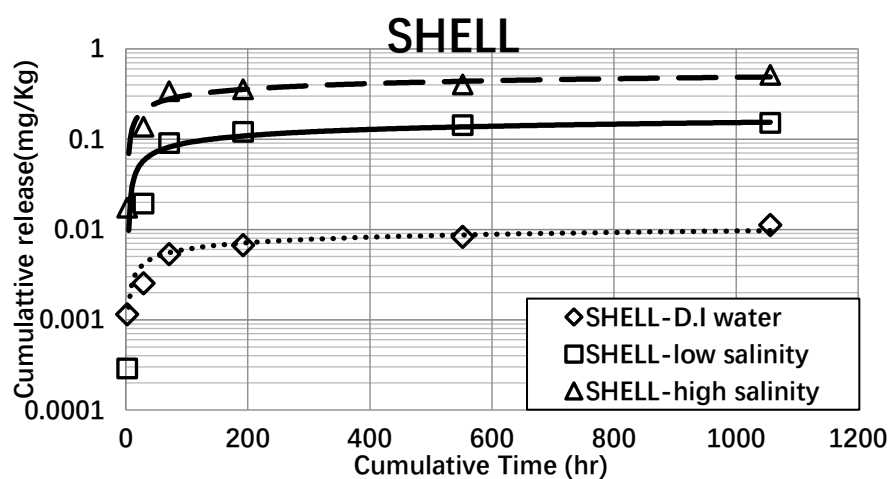
Figure S2. Cumulative mass release for chromium by cumulative time from a) recycled concrete, b) recycled concrete with oyster shell, and c) oyster shell with different salinity.



(a)

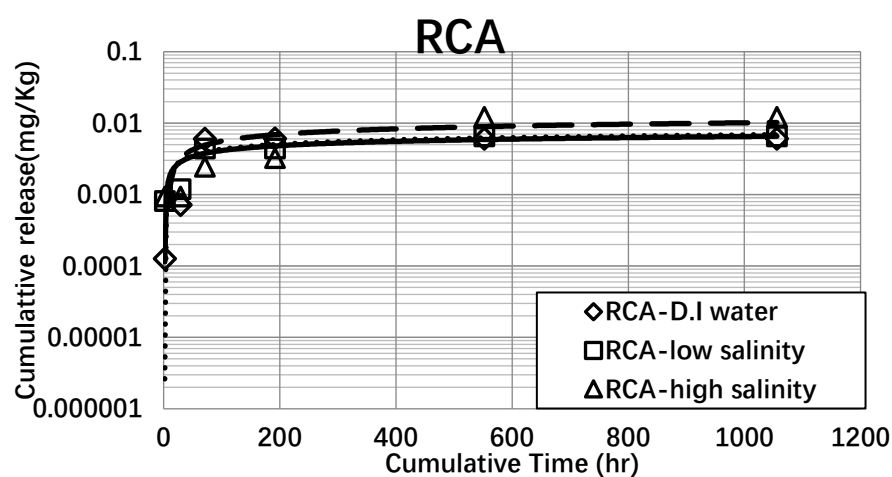


(b)



(c)

Figure S3. Cumulative mass release for manganese by cumulative time from a) recycled concrete, 14
 b) recycled concrete with oyster shell, and c) oyster shell with different salinity. 15



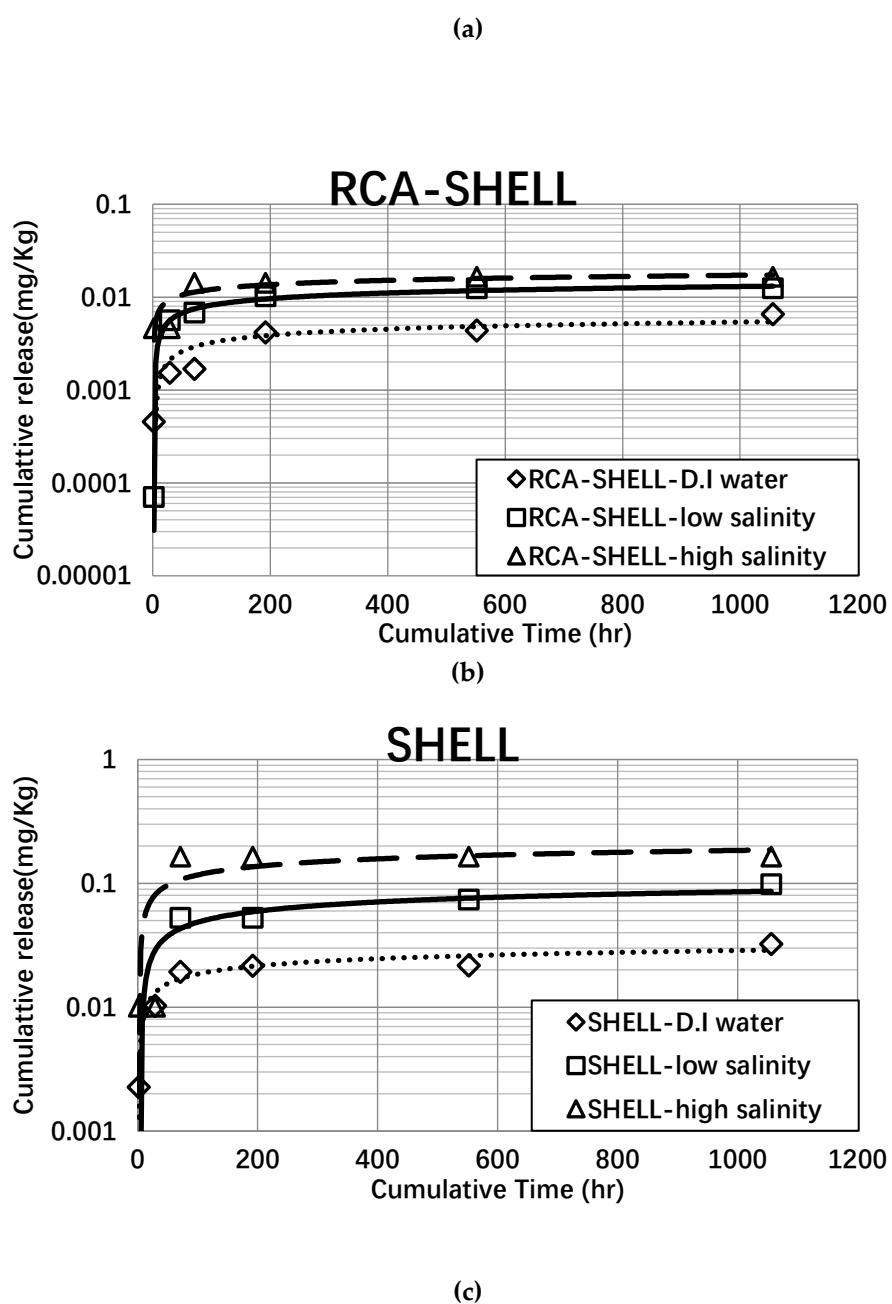


Figure S4. Cumulative mass release for copper by cumulative time from a) recycled concrete, b) recycled concrete with oyster shell, and c) oyster shell with different salinity.

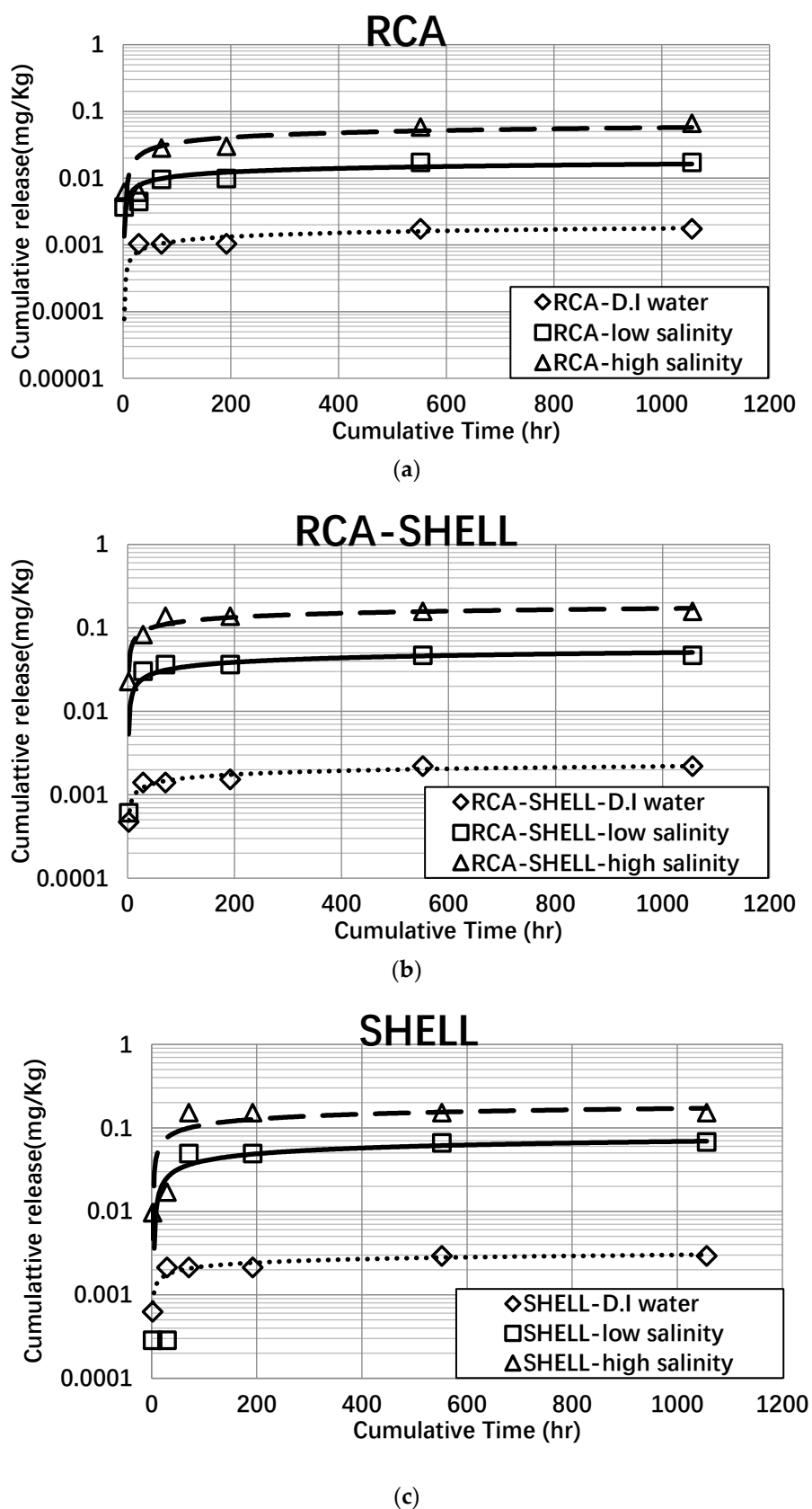


Figure S5. Cumulative mass release for arsenic by cumulative time from a) recycled concrete, b) recycled concrete with oyster shell, and c) oyster shell with different salinity.

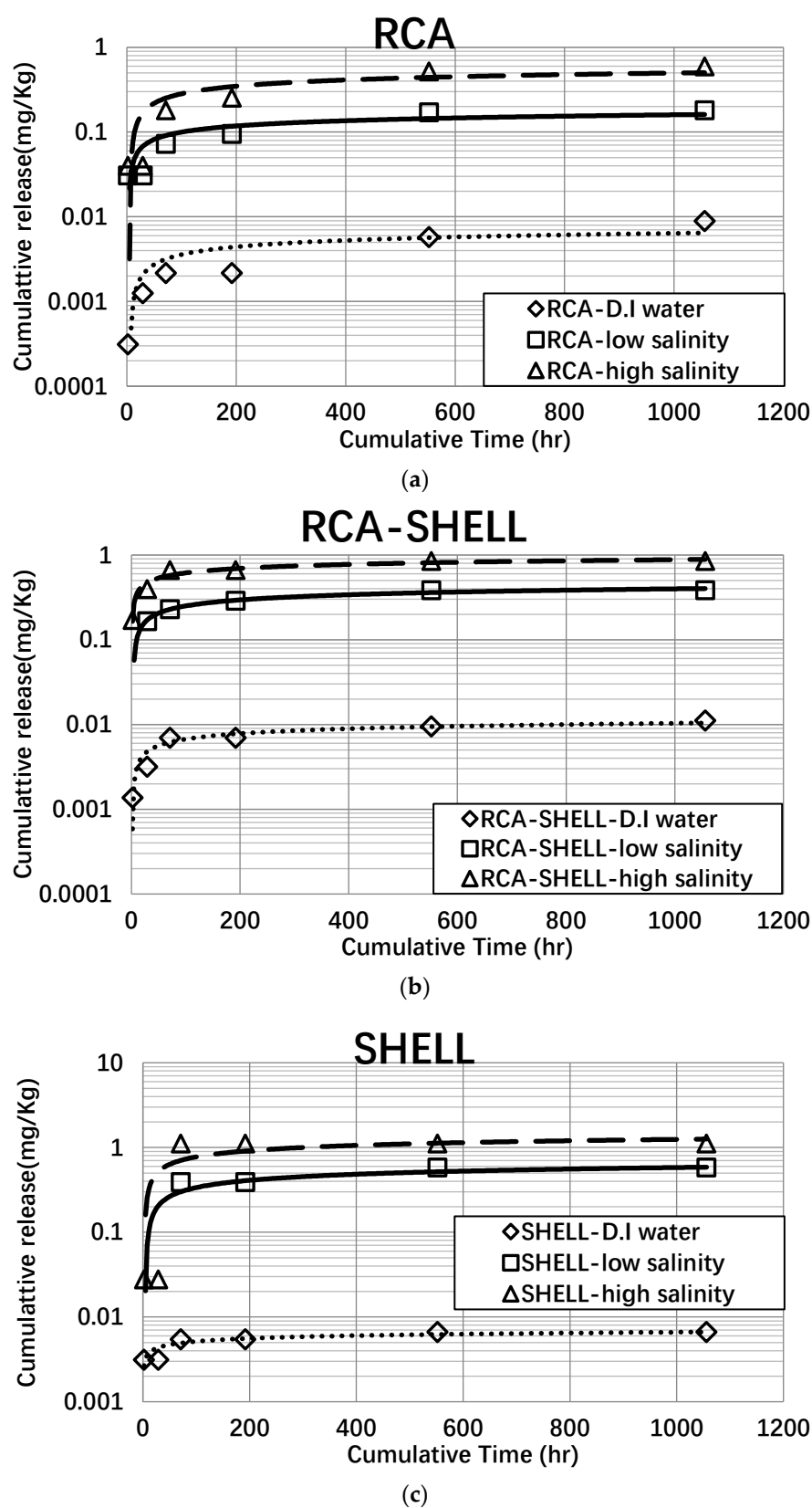
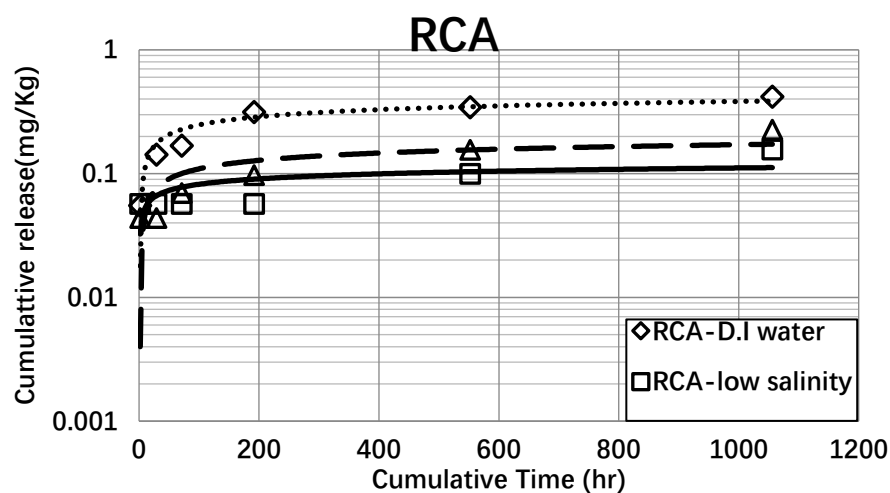
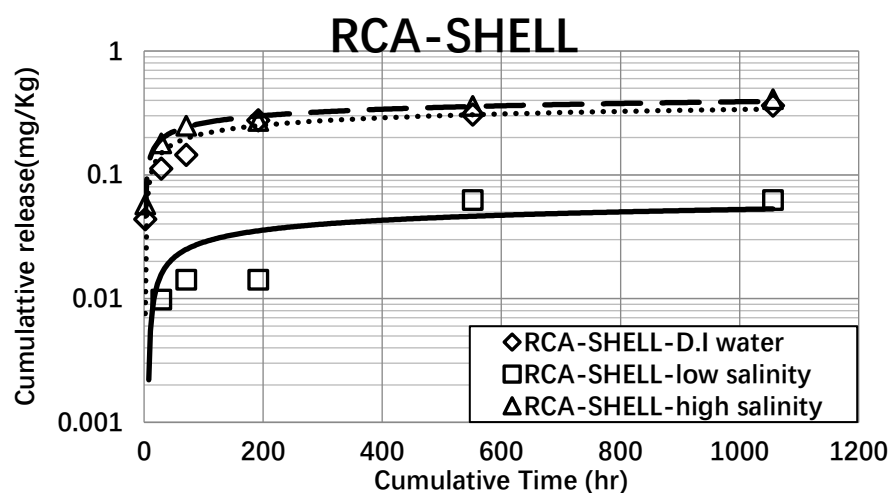


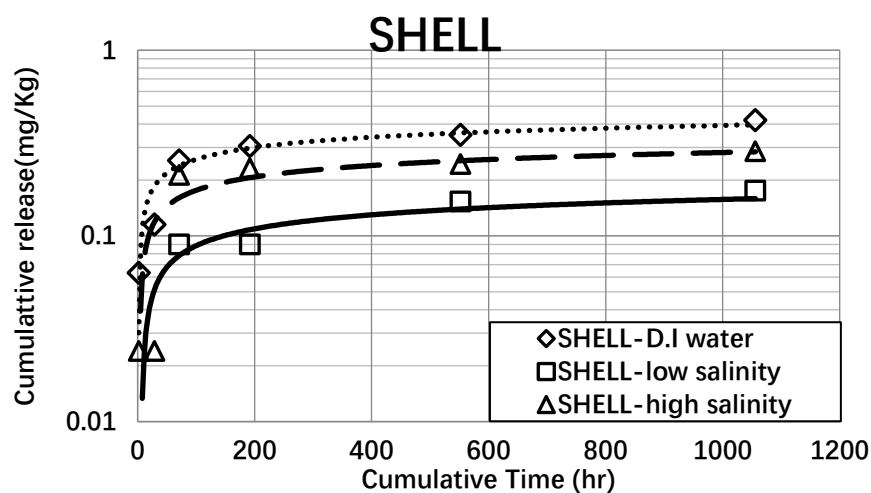
Figure S6. Cumulative mass release for selenium by cumulative time from **a)** recycled concrete, **b)** recycled concrete with oyster shell, and **c)** oyster shell with different salinity. 21 22



(a)



(b)



(c)

Figure S7. Cumulative mass release for barium by cumulative time from a) recycled concrete, b) recycled concrete with oyster shell, and c) oyster shell with different salinity.

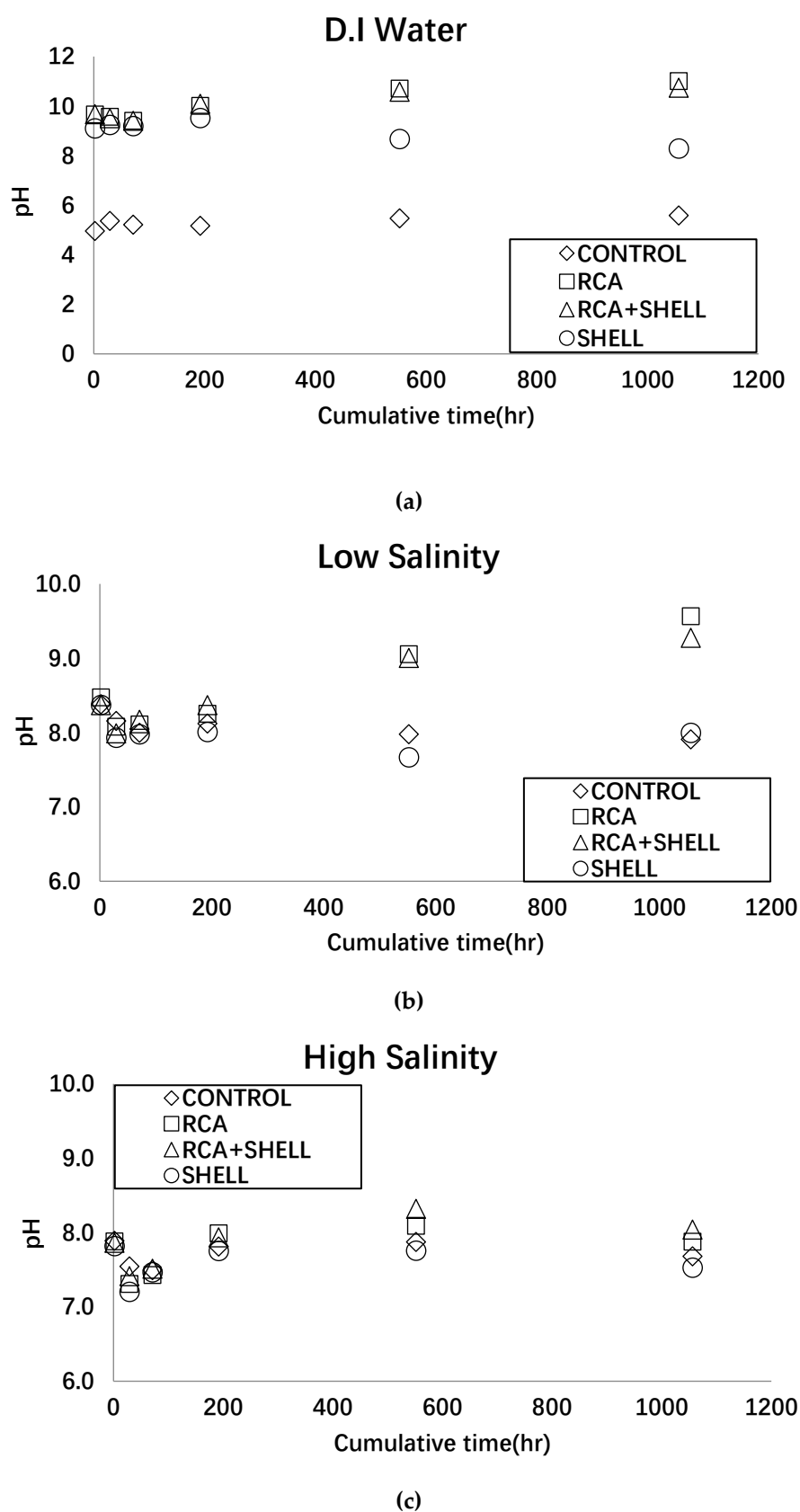


Figure S8. pH by cumulative time from a) D.I(de-ionized) water, b) low salinity, and c) high salinity. 27

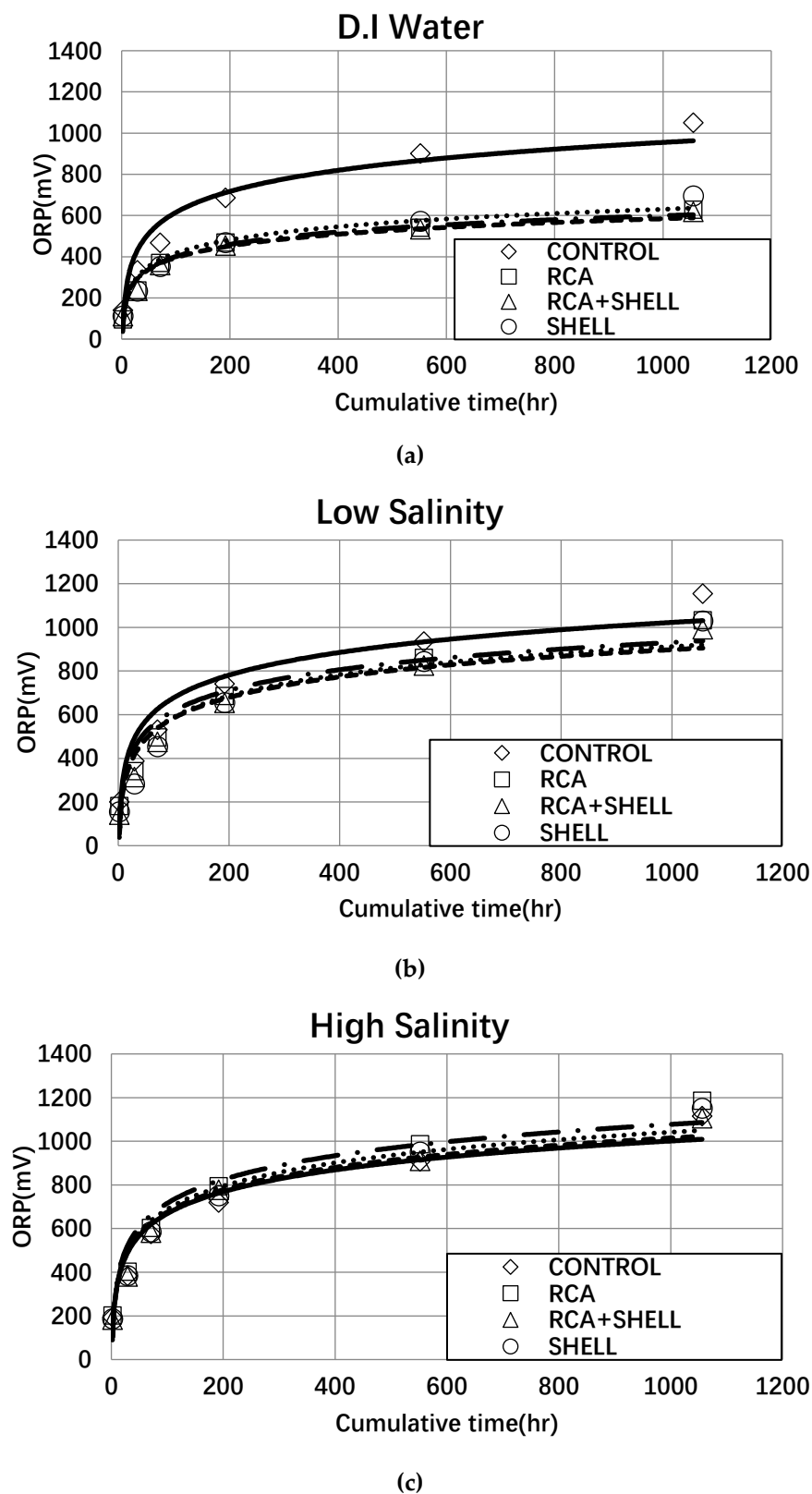


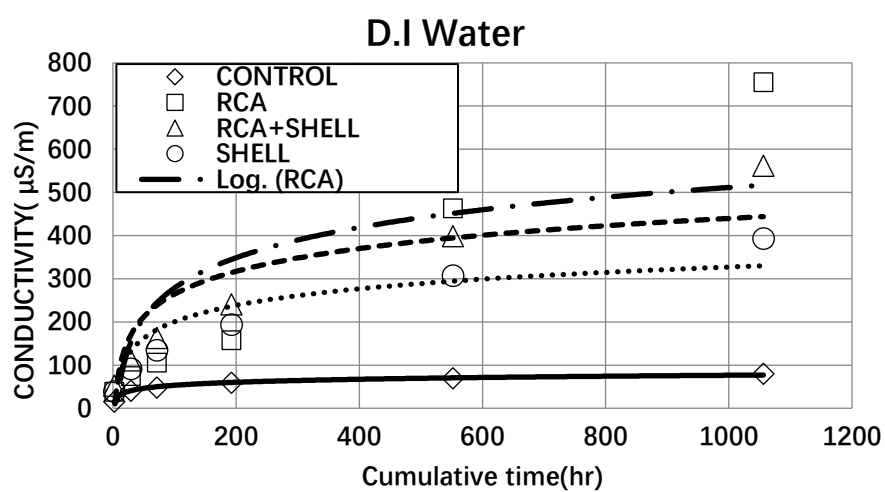
Figure S9. ORP (Oxidation Reduction Potential) by cumulative time from a) D.I (de-ionized) water, b) low salinity, and c) high salinity.

28

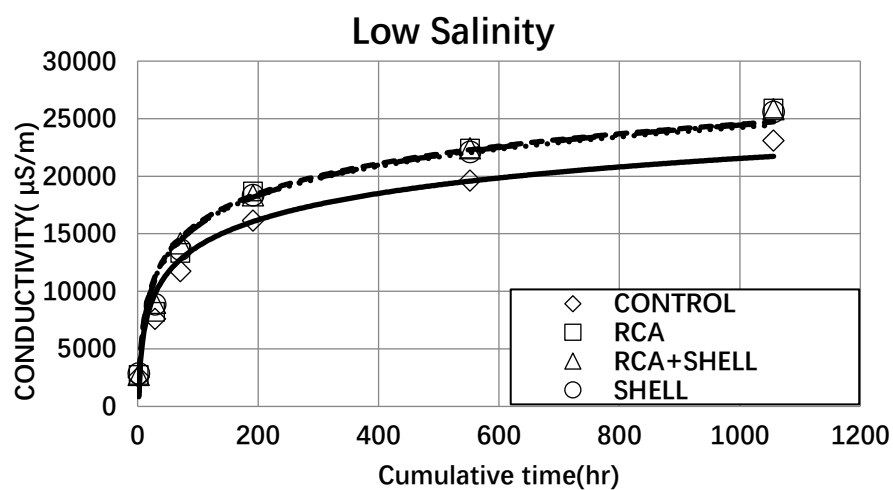
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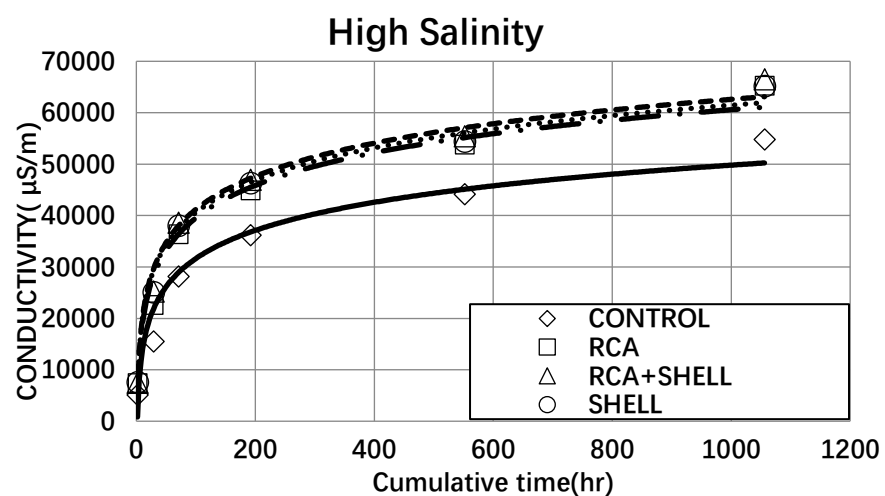
31



(a)



(b)



(c)

Figure S10. Conductivity by cumulative time from a) D.I (de-ionized) water, b) low salinity, and c) high salinity.

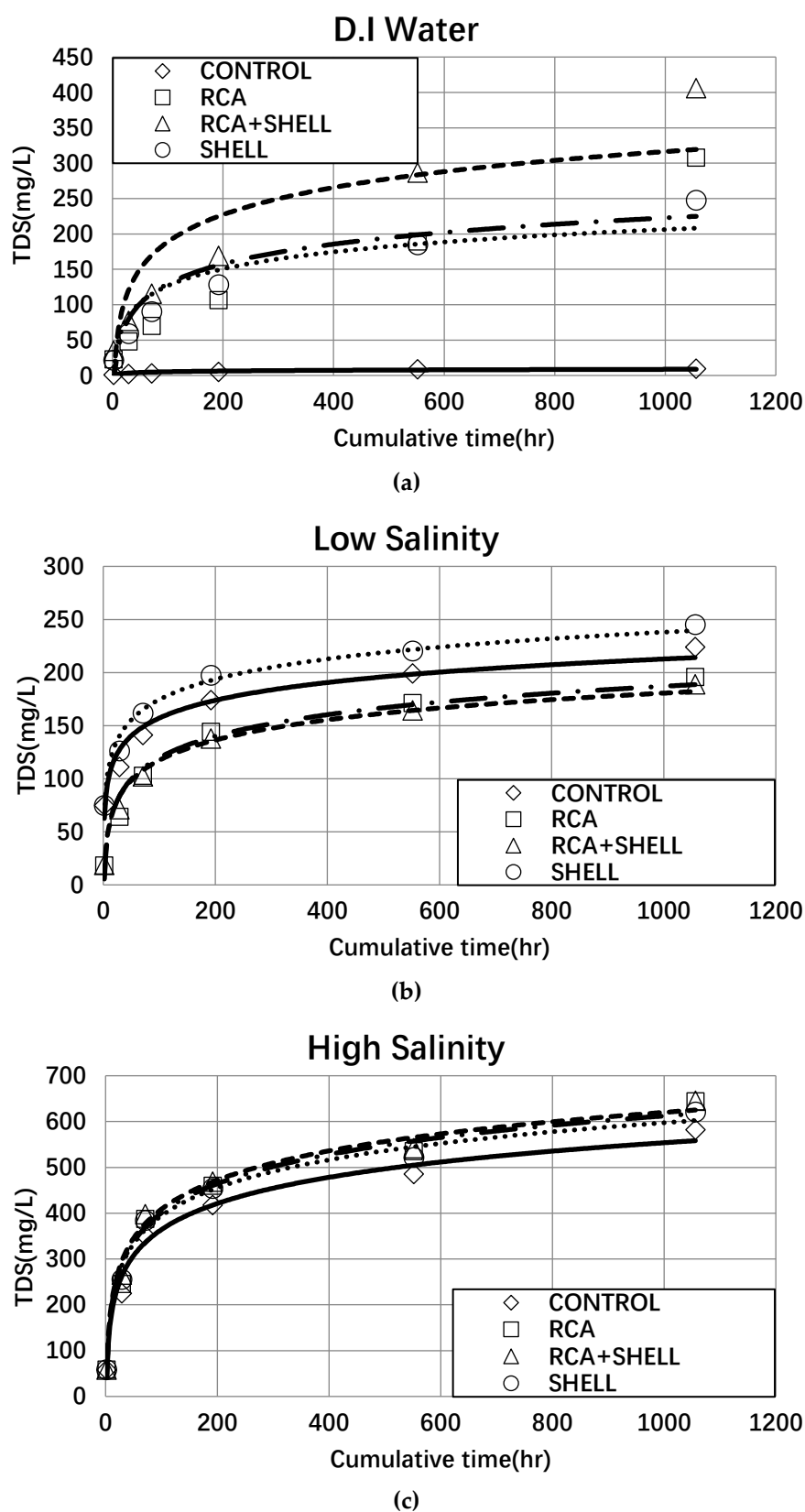
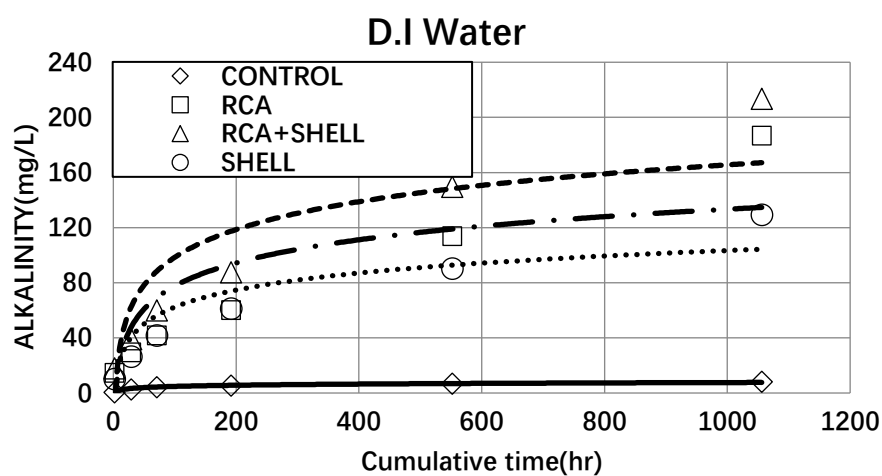
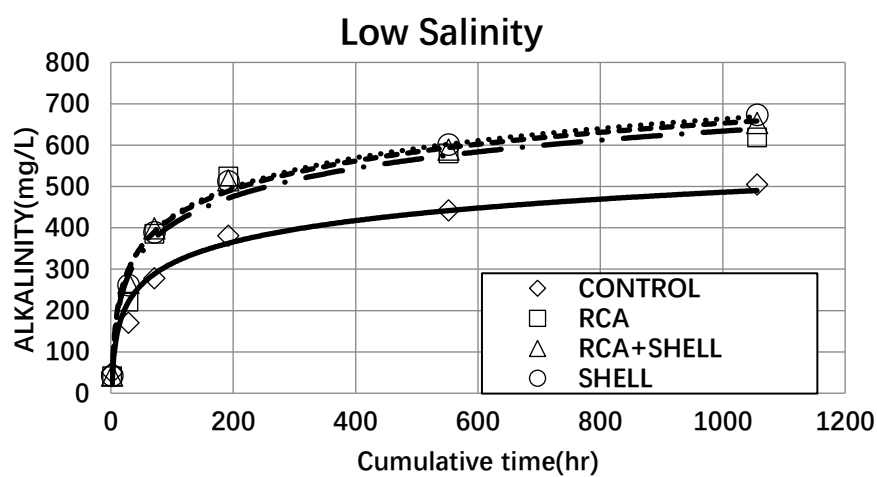


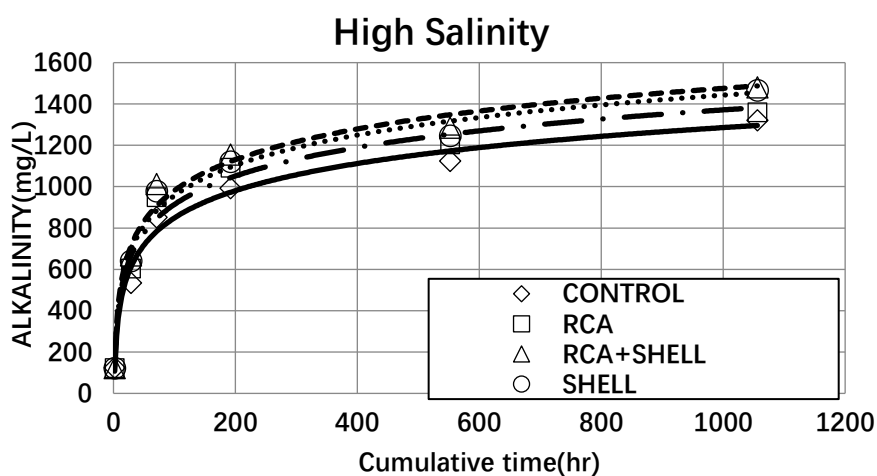
Figure S11. TDS(Total Dissolved Solid) by cumulative time from a) D.I(de-ionized) water, b) low salinity, and c) high salinity.



(a)



(b)



(c)

Figure S12. Alkalinity by cumulative time from a) D.I (de-ionized) water, b) low salinity, and c) high salinity.

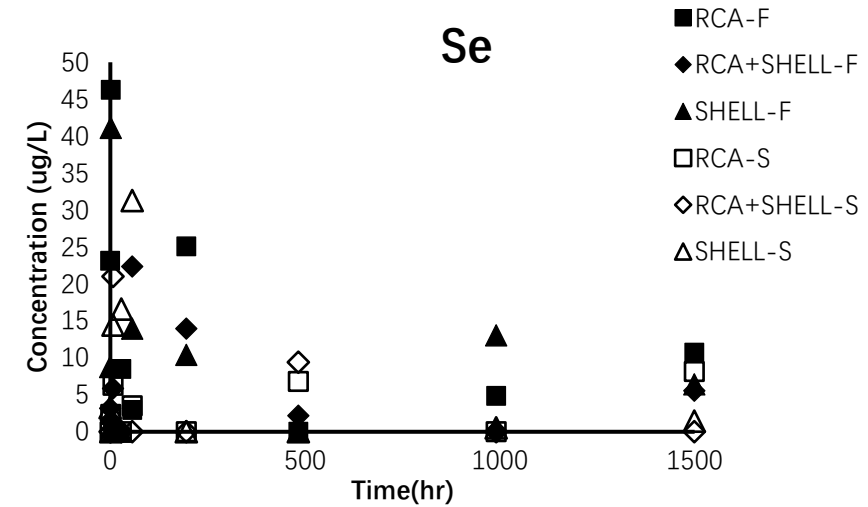


Figure S13. Selenium concentration with brackish water(Patuxent river near St. Leonard, MD) by cumulative time, F : fast flow rate, S: slow flow rate.

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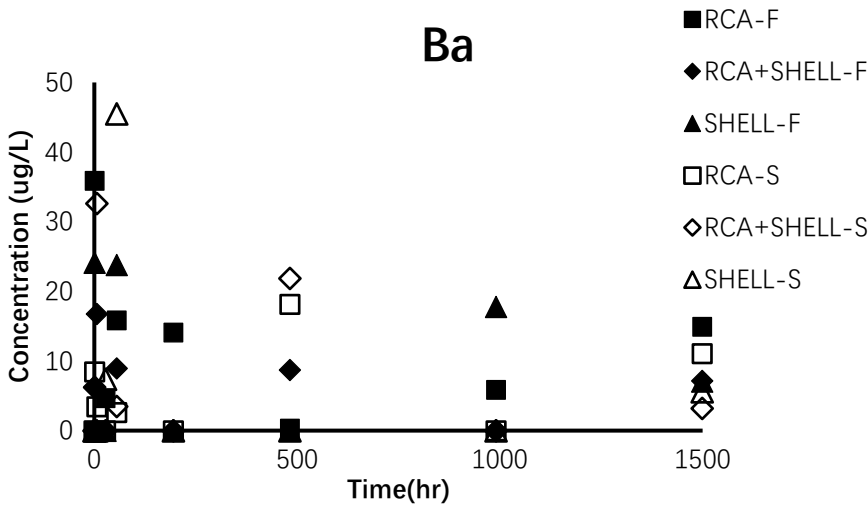
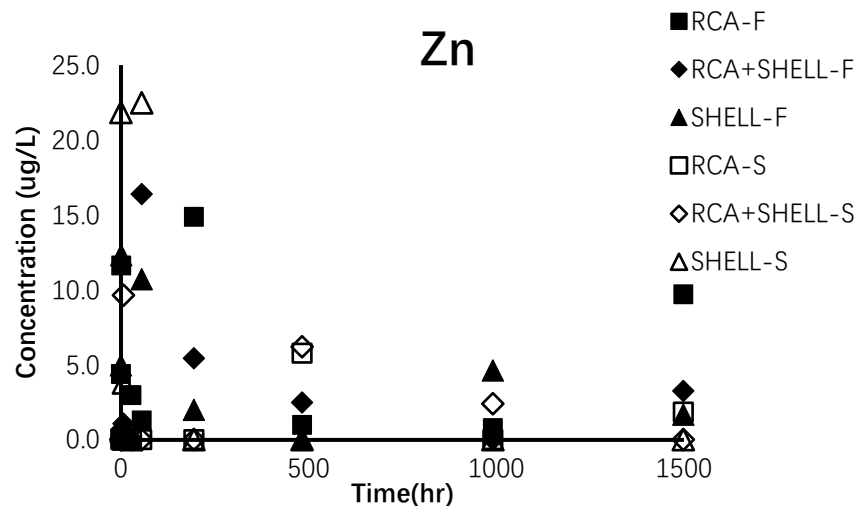


Figure S14. Barium concentration with brackish water(Patuxent river near St. Leonard, MD) by cumulative time, F : fast flow rate, S: slow flow rate.

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Figure S15. Zinc concentration with brackish water(Patuxent river near St. Leonard, MD) by cumulative time, F : fast flow rate, S: slow flow rate.

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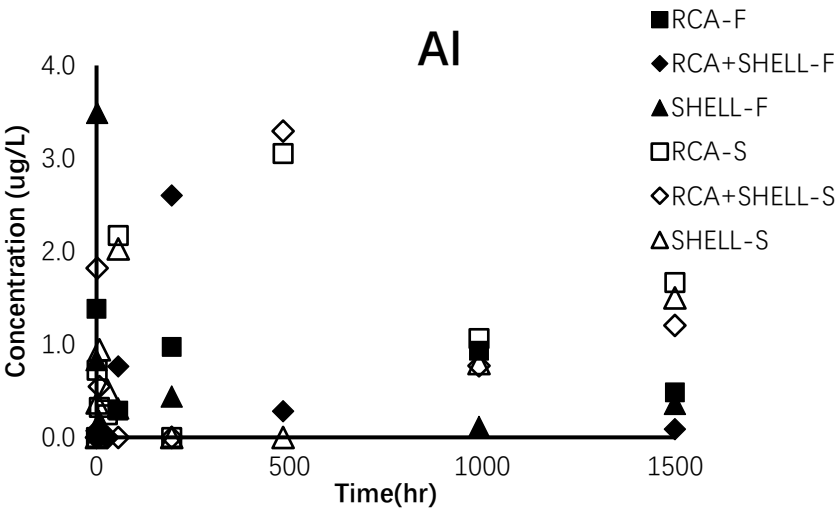


Figure S16. Aluminum concentration with brackish water(Patuxent river near St. Leonard, MD) by cumulative time, F : fast flow rate, S: slow flow rate.

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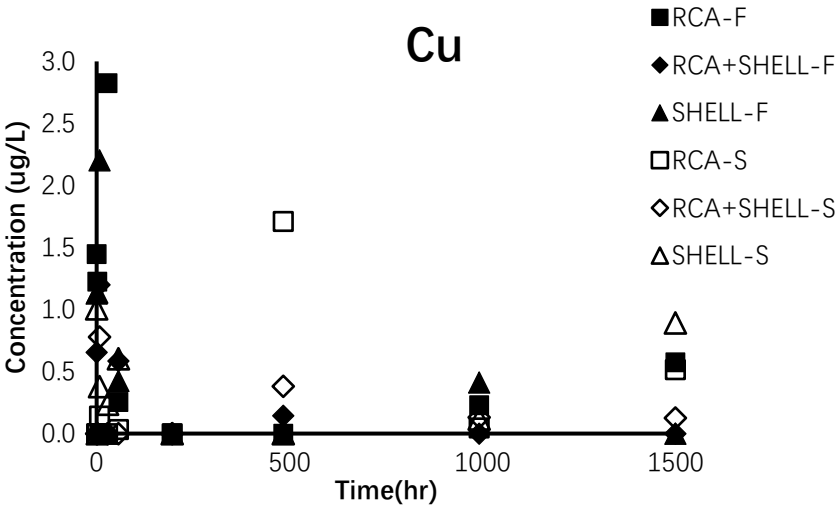
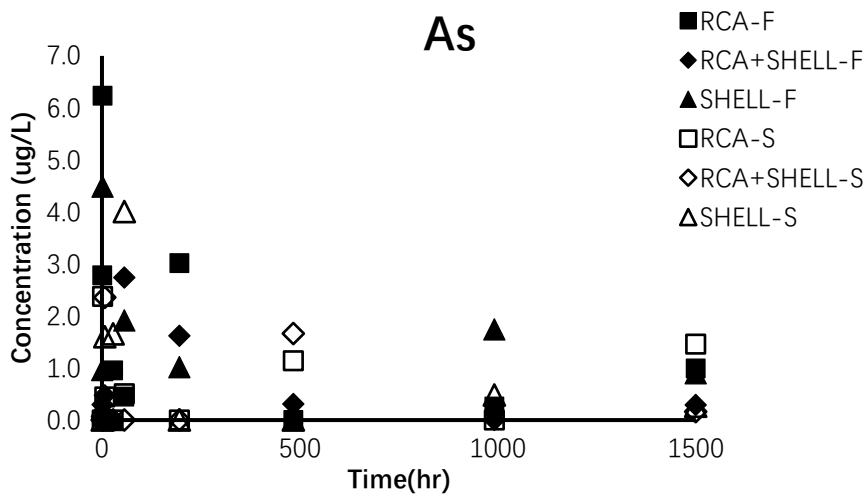


Figure S17. Copper concentration with brackish water(Patuxent river near St. Leonard, MD) by cumulative time, F : fast flow rate, S: slow flow rate.

91
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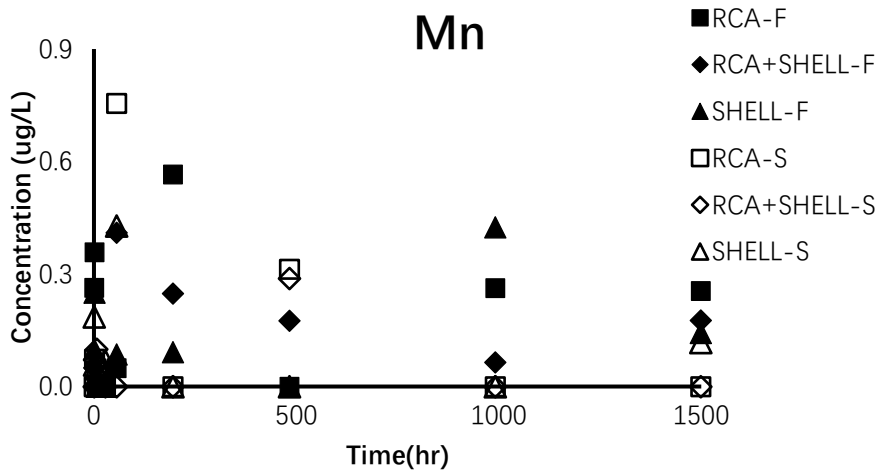


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Figure S18. Arsenic concentration with brackish water(Patuxent river near St. Leonard, MD) by cumulative time, F : fast flow rate, S: slow flow rate.

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102



111

Figure S19. Manganese concentration with brackish water(Patuxent river near St. Leonard, MD) by cumulative time, F : fast flow rate, S: slow flow rate.

112
113

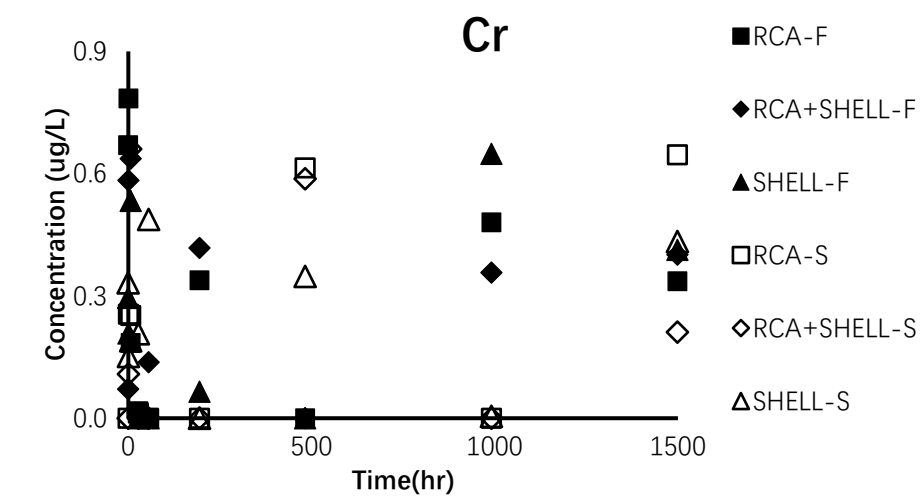


Figure S20. Chromium concentration with brackish water(Patuxent river near St. Leonard, MD) by cumulative time, F : fast flow rate, S: slow flow rate.

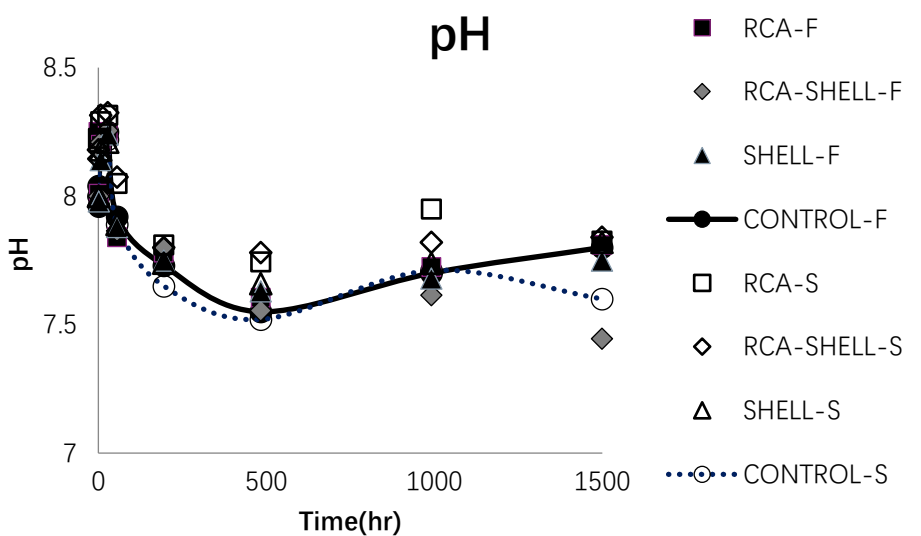


Figure S21. pH for the RCA, RCA-oyster shell, and oyster shell with brackish water supplied from Patuxent river near St. Leonard, MD. by collected time, F : fast flow rate, S: slow flow rate.

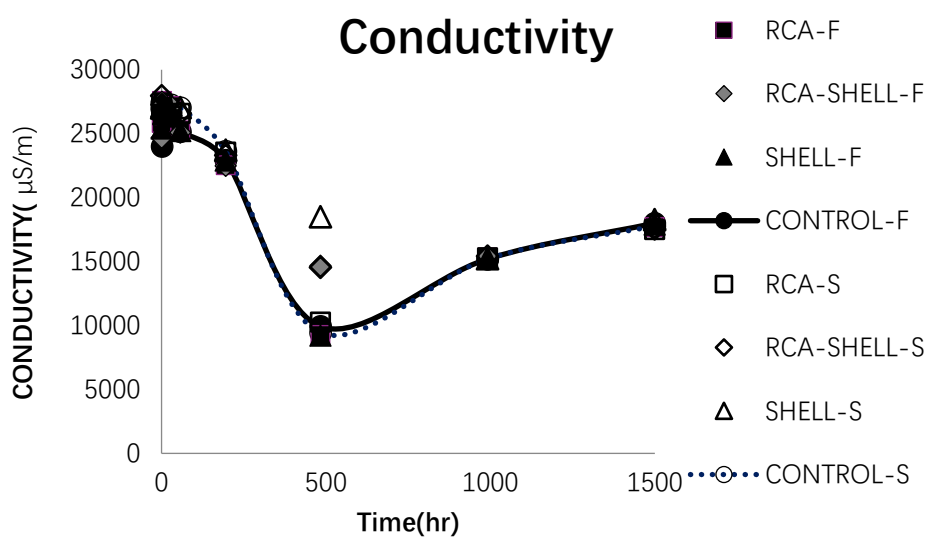


Figure S22. Conductivity for the RCA, RCA-oyster shell, and oyster shell with brackish water supplied from Patuxent river near St. Leonard, MD. by collected time, F : fast flow rate, S: slow flow rate.

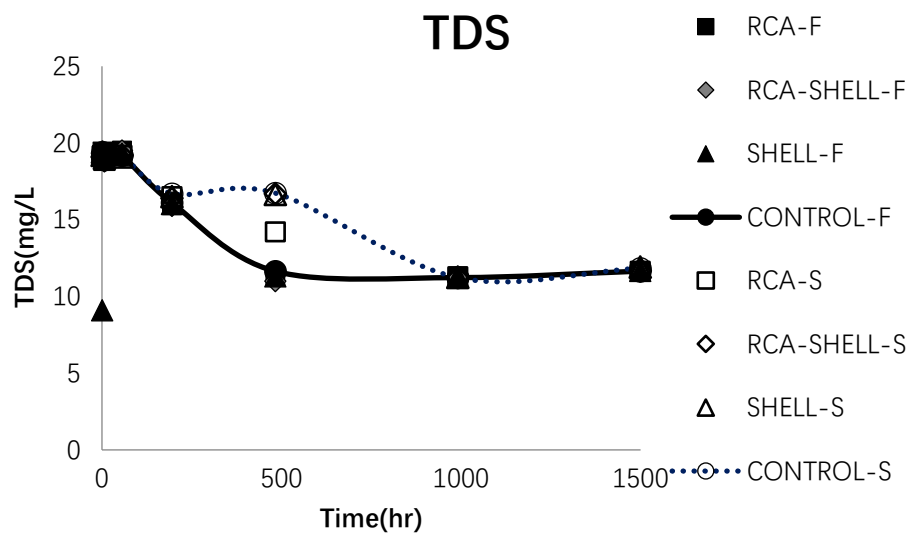


Figure S23. Conductivity for the RCA, RCA-oyster shell, and oyster shell with brackish water supplied from Patuxent river near St. Leonard, MD. by collected time, F : fast flow rate, S: slow flow rate.

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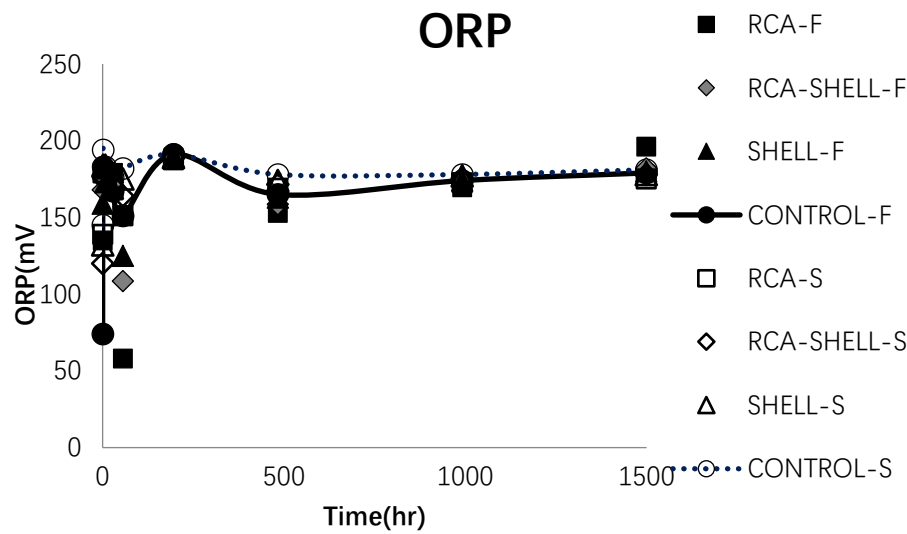


Figure S24. ORP for the RCA, RCA-oyster shell, and oyster shell with brackish water supplied from Patuxent river near St. Leonard, MD. by collected time, F : fast flow rate, S: slow flow rate.

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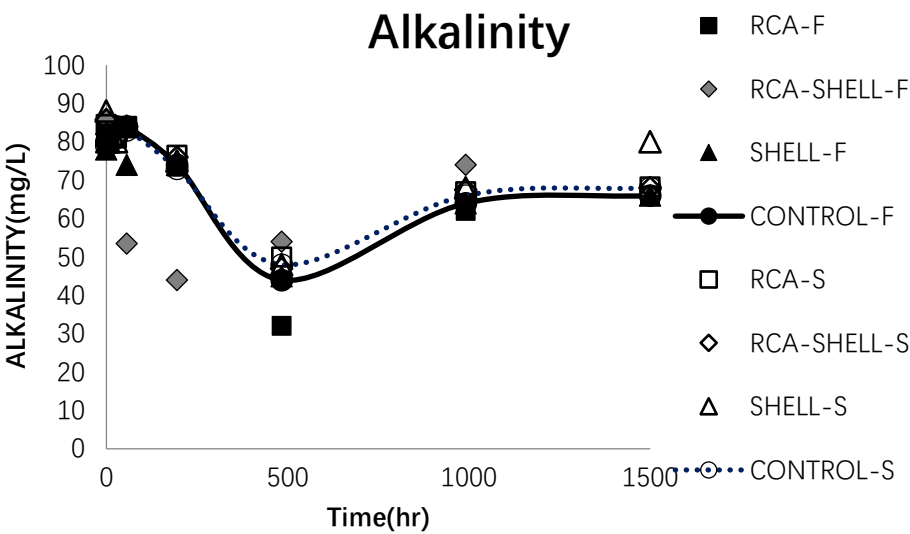


Figure S25. Alkalinity for the RCA, RCA-oyster shell, and oyster shell with brackish water supplied from Patuxent river near St. Leonard, MD. by collected time, F : fast flow rate, S: slow flow rate.

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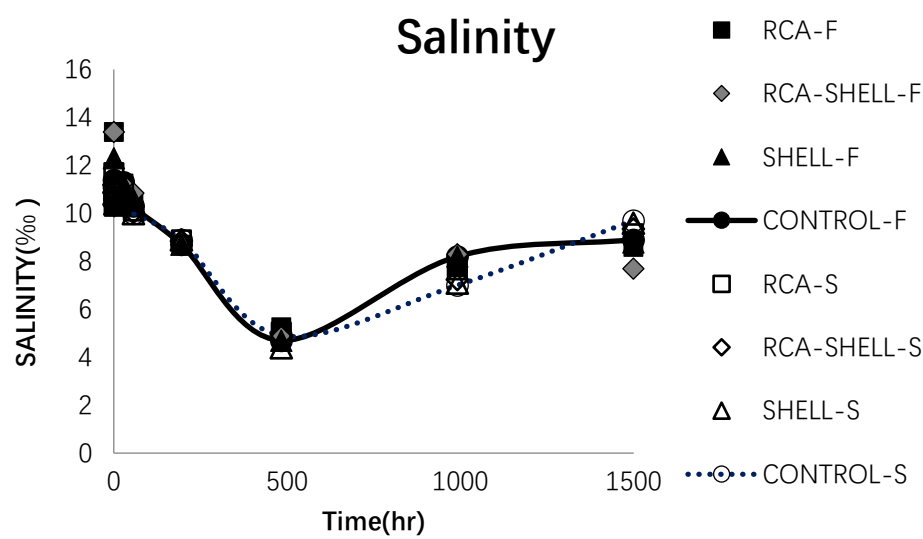


Figure S26. Salinity for the RCA, RCA-oyster shell, and oyster shell with brackish water supplied from Patuxent river near St. Leonard, MD. by collected time, F : fast flow rate, S: slow flow rate.