Statistics:
In my understanding, the data do not follow the normality or homoscedasticity or both, as you used log-transformed data for ANOVA (for experiments 1, 2, 3). I think it is dangerous to discuss based on means in such cases. In the first place, parametric testing using a very small sample size (n=3) which does not satisfy the prerequisites on distribution should be avoided. Why not using non-parametric testing instead?
In addition, post-hoc multiple comparison by Fisher's LSD should not be used for more than 4 groups (since this method does not consider p-value adjustment). Fishers LSD test has been criticized for not sufficiently controlling for Type I error.
If the non-parametric testing will be conducted, and only if it still shows the same outcome, then I would recommend publication after revision.

p-values interpretation:
In the reply comment, you said "p=0.080 is definitively a "trend" and so we can deal with this result". Sometimes I also find papers using this kind of reasoning, but it is not correct. Please read the following,

ASA's Statement on p-Values: Context, Process, and Purpose. The American Statistician, Vol 70, Issue 2, 2016.
It says,
・"A P-value, or statistical significance, does not measure the size of an effect or the importance of a result"
・"P-values do not measure the probability that the studied hypothesis is true, or the probability that the data were produced by random chance alone".

Statistics are very helpful for describing and interpreting the results and should be used, but only be used properly. I think it is most important to look at your data themselves and on the variance of each group very carefully. The attitude that solely relies on "statistical significance" is dangerous.

Unit of salinity:
permil is not appropriate as well… As I pointed out before, salinity has no unit. PSU, rather than permil, was still better, though it is not needed. Please follow the guideline of the journal for unit representation if any.

Table 3:
In the previous review, I recommended representing the data as a figure. I still think it should be so.