

**Grading rubric: Each section is worth a maximum of ten points**

<b>Title:</b> concise title, all lab members signatures (-2 points for each signature missing)	
<b>Abstract:</b> concise, clearly written, statement of all significant results and experiments, written in third person (-2 points not written in third person, -4 points if all key results are not stated)	
<b>Intro:</b> concise, clearly written, describes significance of experiments done in lab. (-5 points if intro is not written about experiments that were actually done)	
<b>Exp:</b> all experiments written AS done. Nothing is included in report that was not actually done in lab, all amounts are given in moles and grams. (-1 point for each solution used whose concentration is not stated, -1 point for anything skipped that was done or for anything written about that was not actually done) <b>MUST CONTAIN QUALITY CONTROL EXP.</b>	
<b>Results:</b> all results are clearly stated, no mistakes in calculations (-3 points for each significant mistake in determining results) <b>MUST CONTAIN QUALITY CONTROL EXP.</b> Results should be presented in a graph (preferably) or in tabular form.	
<b>Discussion:</b> clear discussion of what was observed and its significance to marine ecosystem (-3 points for any result not discussed) Discussion section must discuss quality control	
<b>Tables and graphs:</b> all tables, figures, and graphs must have number and a title (-2 points for any figures or graphs or tables without numbers and titles and -1 for any useless titles, like “Signal Vs. Concentration”); all graphs must have both axes labeled (-2 points for any graphs without axes labeled); calibration curves must have a best-fit trendline and with the equation of the fit and $R^2$ value printed on the graph	
<b>Writing:</b> Writing must be concise, without typographical errors or subscript/superscript errors (-1 point for each typographical error and each subscript/superscript errors – chemical formulas must be written correctly). Sentences must be unambiguous (-1 point for each ambiguous sentence)	
<b>Effort:</b> Lab instructor will assess effort of group and individuals. Being late for lab will cause effort grade to diminish for individual. Coming to lab unprepared will cause effort grade to diminish as well. If results are not posted by end of week for first week of lab and end of class for second and third weeks of each rotation weeks, five points will be deducted for effort (per incident) No rough draft - 3	
<b>Data:</b> Data must make sense and be consistent with class average. Failure to obtain reasonable results will lead to three points being deducted per unreasonable data point with an additional two points deducted if no attempt is made to explain unreasonable result. <b>MUST CONTAIN QUALITY CONTROL EXP.</b> Also, your calibration curve data should be made precisely. Your calibration curve standards must produce a curve with an $R^2$ that is $\geq 0.95$ . You may need to re-make or re-measure your calibration curve in order to achieve this. Failure to do so will result in a loss of 2 points. Failure to report data in timely fashion –5 per offense	

Pay attention to the following details: that the nitrite standard curve took into account the four-fold dilution in manual; that sulfate filter was weighed on analytical balance before and after filtering; that all quality control standards took into account the weight percentage of anion or cation NOT of interest in calculating ppm