

APPENDIX B

Table B1: Statistical comparison of aqueous ammonia concentrations (mol/L) following 1 mL of ammonia gas injection at a 95% confidence level by Tukey's method

1 mL of NH ₃ (g) injected									
	3 mM			30 mM			60 mM		
	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?
30 mM	-2.69E-05	1.40E-04	SAME	-	-	-	-	-	-
60 mM	-4.36E-05	3.13E-04	SAME	-1.68E-05	2.88E-04	SAME	-	-	-
100 mM	-4.43E-04	1.42E-03	SAME	-4.16E-04	1.41E-03	SAME	-3.99E-04	1.41E-03	SAME

Table B2: Statistical comparison of aqueous ammonia concentrations (mol/L) following 5 mL of ammonia gas injection at a 95% confidence level by Tukey's method

5 mL of NH ₃ (g) injected									
	3 mM			30 mM			60 mM		
	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?
30 mM	2.25E-04	3.04E-04	SAME	-	-	-	-	-	-
60 mM	2.88E-04	4.68E-04	SAME	6.31E-05	4.32E-04	SAME	-	-	-
100 mM	2.19E-04	3.81E-04	SAME	-6.22E-06	3.35E-04	SAME	-6.94E-05	3.35E-04	SAME

Table B3: Statistical comparison of aqueous ammonia concentrations (mol/L) following 9 mL of ammonia gas injection at a 95% confidence level by Tukey's method

9 mL of NH ₃ (g) injected									
	3 mM			30 mM			60 mM		
	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?
30 mM	1.09E-04	4.42E-04	SAME	-	-	-	-	-	-
60 mM	1.20E-04	6.56E-04	SAME	1.12E-05	6.32E-04	SAME	-	-	-
100 mM	1.72E-04	6.77E-04	SAME	6.29E-05	6.53E-04	SAME	5.17E-05	6.53E-04	SAME

Table B4: Statistical comparison of aqueous ammonia concentrations (mol/L) following 20 mL of ammonia gas injection at a 95% confidence level by Tukey's method

20 mL of NH ₃ (g) injected									
	3 mM			30 mM			60 mM		
	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?
30 mM	8.14E-04	1.25E-03	SAME	-	-	-	-	-	-
60 mM	8.27E-04	1.69E-03	SAME	1.23E-05	1.47E-03	SAME	-	-	-
100 mM	1.17E-03	3.33E-03	SAME	3.60E-04	3.22E-03	SAME	4.77E-03	3.22E-03	DIFF

Table B5: Statistical comparison of pH following 1 mL of ammonia gas injection at a 95% confidence level by Tukey's method

1 mL of NH ₃ (g) injected									
	3 mM			30 mM			60 mM		
	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?
30 mM	0.38	0.45	SAME	-	-	-	-	-	-
60 mM	0.51	0.47	DIFF	0.13	0.30	SAME	-	-	-
100 mM	0.52	0.43	DIFF	0.14	0.27	SAME	0.02	0.24	SAME

Table B6: Statistical comparison of pH following 5 mL of ammonia gas injection at a 95% confidence level by Tukey's method

5 mL of NH ₃ (g) injected									
	3 mM			30 mM			60 mM		
	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?
30 mM	0.74	0.15	DIFF	-	-	-	-	-	-
60 mM	0.91	0.21	DIFF	0.17	0.23	SAME	-	-	-
100 mM	0.98	0.19	DIFF	0.24	0.26	SAME	0.07	0.21	SAME

Table B7: Statistical comparison of pH following 9 mL of ammonia gas injection at a 95% confidence level by Tukey's method

9 mL of NH₃ (g) injected									
	3 mM			30 mM			60 mM		
	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?
30 mM	0.69	0.12	DIFF	-	-	-	-	-	-
60 mM	0.90	0.17	DIFF	0.21	0.18	DIFF	-	-	-
100 mM	1.00	0.15	DIFF	0.31	0.20	DIFF	0.10	0.16	SAME

Table B8: Statistical comparison of pH following 20 mL of ammonia gas injection at a 95% confidence level by Tukey's method

20 mL of NH₃ (g) injected									
	3 mM			30 mM			60 mM		
	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?	$ \mu_1 - \mu_2 $	95% CI	Diff?
30 mM	0.73	0.11	DIFF	-	-	-	-	-	-
60 mM	0.93	0.14	DIFF	0.20	0.14	DIFF	-	-	-
100 mM	1.06	0.11	DIFF	0.33	0.14	DIFF	0.12	0.12	DIFF