



2018 North American Proficiency Testing Program
Quarter 4 Plant Report - Thursday, January 10, 2019

Laboratory ID
General

Plant Analysis	Units	n	Plant 2018-210			Plant 2018-211			Plant 2018-212		
			Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}
Nutrient Ions											
Dry Matter (%)	%	22	93.9	0.495		94.1	0.750		91.5	0.560	
NO3 - N Cd Rd.	mg/kg	23	646	47.0		1,430	155		169	18.5	
NO3 - N ISE	mg/kg	4	688	144		1,590	318		325	4.00	
NO3 - N Other	mg/kg	4	772	58.5		1,580	81.0		238	39.0	
NH4-N	mg/kg	2	200	47.0		89.5	67.5		298	194	
PO4 - P	mg/kg	9	664	66.0		1,340	64.2		3,080	224	
SO4 - S	mg/kg	5	510	63.0		1,100	135		943	142	
Cl	%	22	0.258	0.035		0.820	0.038		0.156	0.032	
TKN	%	10	2.38	0.085		3.38	0.115		0.770	0.040	
N- Dry Comb.	%	59	2.52	0.060		3.64	0.075		0.816	0.036	
S- Dry Comb.	%	7	0.200	0.020		0.296	0.026		0.150	0.020	
Nitric / Perchloric											
P	%	26	0.150	0.006		0.327	0.016		0.370	0.022	
K	%	27	2.09	0.088		3.14	0.084		2.64	0.094	
Ca	%	27	2.55	0.106		0.450	0.013		1.91	0.070	
Mg	%	27	0.460	0.020		0.250	0.010		0.690	0.040	
S	%	25	0.190	0.010		0.277	0.013		0.152	0.010	
Na	%	24	0.040	0.002		0.005	0.001		0.034	0.002	
Al	mg/kg	17	135	17.8		264	31.1		34.0	4.86	
B	mg/kg	24	241	15.5		12.3	0.740		45.8	1.93	
Zn	mg/kg	27	52.0	3.08		32.0	1.66		58.5	4.49	
Mn	mg/kg	27	81.0	3.70		85.4	4.60		161	7.00	
Fe	mg/kg	27	194	10.2		267	21.2		47.9	3.89	
Cu	mg/kg	27	22.6	0.960		10.7	0.335		17.7	0.750	
Mo	mg/kg	4	0.375	0.080		0.550	0.050		0.330	0.012	
Nitric / Peroxide- MICROWAVE											
P	%	32	0.150	0.010		0.320	0.012		0.372	0.018	
K	%	32	2.08	0.075		3.10	0.099		2.63	0.100	
Ca	%	32	2.48	0.139		0.435	0.025		1.90	0.091	
Mg	%	32	0.443	0.024		0.240	0.010		0.680	0.030	
S	%	31	0.197	0.013		0.280	0.020		0.150	0.010	
Na	%	28	0.040	0.003		0.005	0.001		0.034	0.004	
Al	mg/kg	21	192	45.7		304	54.0		43.4	7.80	
B	mg/kg	32	239	11.7		12.1	1.08		46.4	1.76	
Zn	mg/kg	32	51.2	3.58		31.4	1.59		57.2	3.07	
Mn	mg/kg	32	79.6	4.46		84.8	3.76		162	7.38	
Fe	mg/kg	31	208	18.0		260	18.5		49.7	3.60	
Cu	mg/kg	32	22.1	0.950		10.5	0.685		17.3	0.980	
Mo	mg/kg	15	0.310	0.062		0.480	0.082		0.330	0.080	
Dry Ash											
P	%	10	0.150	0.010		0.330	0.010		0.370	0.010	
K	%	10	2.19	0.095		3.23	0.144		2.74	0.136	

1 - Values flagged exceed Warning Limits *** 2.5 x MAD (Median Absolute Deviation) and Control Limits **** 4 x MAD.
2 - Limits not compared to lab data for methods with less than 7 labs reporting.

Ca	%	10	2.48	<i>0.088</i>	0.440	<i>0.035</i>	1.88	<i>0.024</i>
Mg	%	10	0.465	<i>0.013</i>	0.253	<i>0.013</i>	0.706	<i>0.028</i>
Na	%	9	0.050	<i>0.005</i>	0.018	<i>0.002</i>	0.040	<i>0.006</i>
Al	mg/kg	3	221	<i>2.40</i>	313	<i>3.40</i>	50.7	<i>0.440</i>
B	mg/kg	11	235	<i>14.0</i>	12.3	<i>1.31</i>	43.9	<i>1.32</i>
Zn	mg/kg	10	52.4	<i>2.05</i>	34.2	<i>1.94</i>	59.7	<i>3.30</i>
Mn	mg/kg	10	79.2	<i>2.50</i>	84.5	<i>3.72</i>	162	<i>2.65</i>
Fe	mg/kg	10	190	<i>19.2</i>	256	<i>14.0</i>	51.2	<i>3.58</i>
Cu	mg/kg	10	22.2	<i>1.35</i>	10.4	<i>0.570</i>	17.9	<i>1.15</i>
Mo	mg/kg	2	0.368	<i>0.132</i>	0.528	<i>0.122</i>	0.389	<i>0.171</i>