



2019 North American Proficiency Testing Program
 Quarter 3 Plant Report - Monday, October 21, 2019

Laboratory ID
 General

Plant Analysis	Plant 2019-207					Plant 2019-208			Plant 2019-209		
	Units	n	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}
Nutrient Ions											
Dry Matter (%)	%	21	95.1	0.900		95.4	0.700		91.8	0.430	
NO3 - N Cd Rd.	mg/kg	26	432	36.1		35.0	5.40		2,480	236	
NO3 - N ISE	mg/kg	4	514	109		116	60.0		2,300	263	
NO3 - N Other	mg/kg	3	420	55.0		70.0	2.10		2,830	394	
NH4-N	mg/kg	3	79.0	19.0		104	14.0		534	16.6	
PO4 - P	mg/kg	10	1,250	42.5		1,430	26.4		1,540	41.0	
SO4 - S	mg/kg	3	1,740	21.8		571	22.0		5,690	77.9	
Cl	%	23	0.600	0.020		0.279	0.019		1.70	0.090	
TKN	%	12	2.98	0.048		2.63	0.090		3.60	0.110	
N- Dry Comb.	%	62	3.05	0.050		2.69	0.058		3.69	0.060	
S- Dry Comb.	%	9	0.310	0.020		0.150	0.001		0.798	0.098	
Nitric / Perchloric											
P	%	30	0.262	0.012		0.256	0.008		0.285	0.010	
K	%	30	2.23	0.090		2.94	0.073		2.16	0.070	
Ca	%	30	1.58	0.058		1.23	0.026		2.98	0.104	
Mg	%	30	0.322	0.012		0.350	0.010		1.75	0.040	
S	%	28	0.314	0.012		0.160	0.007		0.776	0.019	
Na	%	25	0.170	0.005		0.018	0.001		0.280	0.010	
Al	mg/kg	18	230	14.6		24.3	3.91		127	12.4	
B	mg/kg	27	46.2	2.16		23.0	1.61		103	5.21	
Zn	mg/kg	30	22.6	1.28		19.2	0.780		40.2	1.50	
Mn	mg/kg	30	35.0	1.06		40.5	1.82		86.5	3.50	
Fe	mg/kg	30	405	33.7		64.7	3.64		225	14.2	
Cu	mg/kg	31	8.75	0.739		8.00	0.470		16.1	1.10	
Mo	mg/kg	9	1.65	0.173		0.877	0.052		0.710	0.092	
Nitric / Peroxide- MICROWAVE											
P	%	33	0.257	0.007		0.256	0.006		0.280	0.010	
K	%	33	2.18	0.090		2.90	0.124		2.12	0.090	
Ca	%	33	1.51	0.044		1.16	0.048		2.87	0.100	
Mg	%	33	0.320	0.019		0.345	0.016		1.71	0.090	
S	%	32	0.310	0.010		0.156	0.004		0.788	0.026	
Na	%	24	0.170	0.010		0.020	0.003		0.279	0.017	
Al	mg/kg	19	325	73.2		27.5	3.73		167	17.3	
B	mg/kg	33	45.2	1.83		22.0	1.09		100	7.64	
Zn	mg/kg	32	22.8	1.27		19.0	1.13		38.0	2.40	
Mn	mg/kg	32	35.3	1.46		39.5	2.02		82.9	4.31	
Fe	mg/kg	33	474	46.0		64.0	6.00		241	18.6	
Cu	mg/kg	33	8.50	0.608		7.70	0.590		15.7	1.30	
Mo	mg/kg	14	1.59	0.070		0.814	0.040		0.700	0.100	
Dry Ash											
P	%	12	0.262	0.010		0.265	0.015		0.295	0.020	
K	%	12	2.20	0.090		2.93	0.080		2.26	0.148	

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	%	12	1.50	<i>0.065</i>	1.15	<i>0.065</i>	2.88	<i>0.205</i>
Mg	%	12	0.315	<i>0.012</i>	0.346	<i>0.015</i>	1.71	<i>0.160</i>
Na	%	11	0.182	<i>0.022</i>	0.032	<i>0.008</i>	0.296	<i>0.026</i>
Al	mg/kg	2	334	<i>24.5</i>	30.0	<i>0.905</i>	180	<i>9.87</i>
B	mg/kg	13	45.1	<i>2.91</i>	23.0	<i>1.46</i>	98.2	<i>5.59</i>
Zn	mg/kg	12	22.0	<i>2.00</i>	19.0	<i>2.64</i>	40.0	<i>4.65</i>
Mn	mg/kg	12	34.0	<i>1.25</i>	40.0	<i>2.83</i>	86.0	<i>8.75</i>
Fe	mg/kg	12	357	<i>68.5</i>	77.0	<i>13.3</i>	221	<i>23.5</i>
Cu	mg/kg	12	8.62	<i>0.916</i>	8.22	<i>0.955</i>	14.2	<i>1.70</i>
Mo	mg/kg	1	1.89	<i>0.000</i>	1.19	<i>0.000</i>	1.17	<i>0.000</i>