



2020 North American Proficiency Testing Program  
Quarter 1 Plant Report - Tuesday, May 12, 2020

Laboratory ID  
General

Plant	Plant 2020-201					Plant 2020-202			Plant 2020-203		
Analysis	Units	n	Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>	Median	MAD	Lab <sup>1,2</sup>
<b>Nutrient Ions</b>											
Dry Matter (%)	%	24	92.1	0.810		93.8	0.725		93.9	0.625	
NO3 - N Cd Rd.	mg/kg	26	502	34.4		382	28.0		21.0	03.6	
NO3 - N ISE	mg/kg	3	539	21.0		552	149		94.0	3.25	
NO3 - N Other	mg/kg	6	601	126		370	106		70.0	64.0	
NH4-N	mg/kg	3	565	5.00		138	0.600		49.0	7.97	
PO4 - P	mg/kg	11	3,390	252		1,340	125		583	61.3	
SO4 - S	mg/kg	6	1,190	128		1,350	124		262	83.5	
Cl	%	24	0.205	0.040		0.635	0.036		0.075	0.012	
TKN	%	13	0.900	0.070		2.82	0.200		2.30	0.090	
N- Dry Comb.	%	65	0.900	0.030		2.97	0.051		2.36	0.040	
S- Dry Comb.	%	9	0.150	0.020		0.280	0.024		0.136	0.016	
<b>Nitric / Perchloric</b>											
P	%	29	0.390	0.020		0.240	0.010		0.175	0.006	
K	%	30	2.99	0.156		2.38	0.095		1.26	0.065	
Ca	%	30	1.80	0.078		1.49	0.066		2.66	0.109	
Mg	%	30	0.674	0.034		0.356	0.024		0.744	0.031	
S	%	29	0.150	0.009		0.260	0.010		0.130	0.010	
Na	%	25	0.034	0.003		0.085	0.005		0.008	0.002	
Al	mg/kg	17	69.1	7.90		259	56.9		41.0	03.1	
B	mg/kg	26	43.2	2.80		39.1	2.32		40.7	3.00	
Zn	mg/kg	30	64.1	3.83		22.2	1.21		49.4	2.06	
Mn	mg/kg	30	157	9.57		43.6	1.27		37.4	1.38	
Fe	mg/kg	30	104	9.20		308	35.8		67.5	7.50	
Cu	mg/kg	31	12.9	1.58		12.1	1.07		7.10	0.770	
Mo	mg/kg	10	0.208	0.040		1.74	0.112		0.120	0.007	
<b>Nitric / Peroxide- MICROWAVE</b>											
P	%	36	0.398	0.016		0.242	0.008		0.180	0.006	
K	%	36	2.98	0.108		2.37	0.060		1.24	0.055	
Ca	%	36	1.75	0.050		1.50	0.052		2.63	0.090	
Mg	%	36	0.645	0.025		0.344	0.014		0.710	0.030	
S	%	35	0.150	0.009		0.264	0.012		0.130	0.006	
Na	%	28	0.032	0.002		0.085	0.004		0.005	0.001	
Al	mg/kg	22	106	26.5		397	045		63.5	12.7	
B	mg/kg	36	43.5	2.03		39.7	1.52		41.8	2.24	
Zn	mg/kg	36	65.8	4.39		22.7	1.10		49.8	2.15	
Mn	mg/kg	36	155	8.37		44.6	1.60		38.0	1.54	
Fe	mg/kg	36	110	7.04		354	39.5		73.4	5.54	
Cu	mg/kg	36	13.2	0.755		12.1	0.789		7.07	0.494	
Mo	mg/kg	12	0.250	0.041		1.90	0.104		0.175	0.034	

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.

**Dry Ash**

<b>P</b>	%	13	<b>0.386</b>	<i>0.016</i>	<b>0.240</b>	<i>0.010</i>	<b>0.180</b>	<i>0.006</i>
<b>K</b>	%	13	<b>3.02</b>	<i>0.237</i>	<b>2.39</b>	<i>0.120</i>	<b>1.29</b>	<i>0.060</i>
<b>Ca</b>	%	13	<b>1.75</b>	<i>0.130</i>	<b>1.45</b>	<i>0.100</i>	<b>2.58</b>	<i>0.200</i>
<b>Mg</b>	%	13	<b>0.640</b>	<i>0.040</i>	<b>0.340</b>	<i>0.010</i>	<b>0.703</b>	<i>0.043</i>
<b>Na</b>	%	11	<b>0.041</b>	<i>0.006</i>	<b>0.095</b>	<i>0.006</i>	<b>0.010</b>	<i>0.002</i>
<b>Al</b>	mg/kg	3	<b>112</b>	<i>2.50</i>	<b>481</b>	<i>21.8</i>	<b>69.6</b>	<i>4.00</i>
<b>B</b>	mg/kg	13	<b>43.9</b>	<i>2.20</i>	<b>40.1</b>	<i>2.36</i>	<b>40.7</b>	<i>1.90</i>
<b>Zn</b>	mg/kg	13	<b>62.2</b>	<i>2.80</i>	<b>22.7</b>	<i>1.90</i>	<b>47.0</b>	<i>3.90</i>
<b>Mn</b>	mg/kg	13	<b>155</b>	<i>6.00</i>	<b>41.9</b>	<i>2.60</i>	<b>38.0</b>	<i>3.14</i>
<b>Fe</b>	mg/kg	13	<b>98.1</b>	<i>11.0</i>	<b>330</b>	<i>26.9</i>	<b>73.1</b>	<i>6.14</i>
<b>Cu</b>	mg/kg	13	<b>13.2</b>	<i>0.810</i>	<b>12.1</b>	<i>0.520</i>	<b>6.81</b>	<i>1.11</i>
<b>Mo</b>	mg/kg	3	<b>0.500</b>	<i>0.200</i>	<b>2.00</b>	<i>0.130</i>	<b>0.400</b>	<i>0.130</i>

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2 - Limits not compared to lab data for methods with less than 7 labs reporting.