



2021 North American Proficiency Testing Program  
 Quarter 1 Plant Report - Wednesday, April 14, 2021

Laboratory ID  
 General

Plant Analysis	Units	n	Plant 2021-201			Plant 2021-202			Plant 2021-203		
			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 (%)	%	26	95.0	0.465		93.8	0.570		94.0	0.430	
NO3 - N Cd Rd.	mg/kg	32	554	51.3		2,460	210		26.1	05.3	
NO3 - N ISE	mg/kg	3	843	81.0		2,910	218		110	41.0	
NO3 - N Other	mg/kg	6	580	44.8		2,230	396		70.0	50.0	
NH4-N	mg/kg	6	58.9	10.5		347	98.5		102	32.8	
PO4 - P	mg/kg	12	1,690	166		2,290	164		906	49.2	
SO4 - S	mg/kg	5	741	84.2		839	185		476	227	
Cl	%	25	0.500	0.050		0.305	0.064		0.130	0.010	
TKN	%	14	3.10	0.095		2.33	0.105		1.53	0.105	
N- Dry Comb.	%	68	3.24	0.060		2.40	0.062		1.47	0.041	
S- Dry Comb.	%	10	0.252	0.015		0.169	0.010		0.112	0.014	
<b>Nitric / Perchloric</b>											
P	%	30	0.318	0.014		0.358	0.014		0.208	0.008	
K	%	30	2.40	0.077		2.76	0.122		0.753	0.035	
Ca	%	29	0.562	0.037		1.99	0.083		3.30	0.102	
Mg	%	29	0.250	0.010		0.513	0.026		0.931	0.039	
S	%	28	0.229	0.019		0.150	0.010		0.104	0.006	
Na	%	25	0.034	0.004		0.010	0.001		0.041	0.003	
Al	mg/kg	18	102	8.12		121	8.45		95.4	06.7	
B	mg/kg	26	21.9	1.54		34.2	3.00		49.0	3.15	
Zn	mg/kg	29	42.6	2.56		43.0	2.93		12.6	1.38	
Mn	mg/kg	29	88.0	3.27		85.8	4.20		32.0	1.50	
Fe	mg/kg	29	175	19.9		194	21.6		117	12.5	
Cu	mg/kg	30	9.03	0.655		6.50	0.495		6.04	0.650	
Mo	mg/kg	10	1.04	0.160		5.37	0.403		0.745	0.108	
<b>Nitric / Peroxide- MICROWAVE</b>											
P	%	40	0.320	0.010		0.360	0.010		0.207	0.007	
K	%	40	2.40	0.111		2.75	0.130		0.753	0.047	
Ca	%	40	0.540	0.028		1.97	0.052		3.26	0.100	
Mg	%	40	0.250	0.010		0.503	0.014		0.913	0.039	
S	%	37	0.239	0.011		0.157	0.009		0.105	0.006	
Na	%	30	0.034	0.003		0.010	0.002		0.040	0.002	
Al	mg/kg	23	128	30.5		173	42.7		116	26.5	
B	mg/kg	40	22.0	1.01		34.6	2.03		50.0	2.54	
Zn	mg/kg	40	41.9	1.72		42.2	2.44		12.6	1.40	
Mn	mg/kg	40	84.1	2.92		82.3	2.75		31.5	1.40	
Fe	mg/kg	40	190	11.0		194	17.6		130	7.35	
Cu	mg/kg	40	9.32	0.459		6.41	0.425		5.68	0.315	
Mo	mg/kg	13	1.10	0.100		5.50	0.220		0.695	0.110	
<b>Dry Ash</b>											
P	%	14	0.325	0.015		0.360	0.020		0.215	0.015	
K	%	14	2.37	0.135		2.72	0.175		0.750	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.

<b>Ca</b>	%	14	<b>0.535</b>	<i>0.040</i>	<b>1.96</b>	<i>0.094</i>	<b>3.28</b>	<i>0.140</i>
<b>Mg</b>	%	14	<b>0.254</b>	<i>0.014</i>	<b>0.505</b>	<i>0.025</i>	<b>0.920</b>	<i>0.045</i>
<b>Na</b>	%	12	<b>0.040</b>	<i>0.002</i>	<b>0.020</b>	<i>0.004</i>	<b>0.048</b>	<i>0.003</i>
<b>Al</b>	mg/kg	4	<b>124</b>	<i>20.6</i>	<b>186</b>	<i>13.7</i>	<b>123</b>	<i>11.8</i>
<b>B</b>	mg/kg	14	<b>21.4</b>	<i>1.37</i>	<b>33.0</b>	<i>0.910</i>	<b>48.9</b>	<i>1.55</i>
<b>Zn</b>	mg/kg	14	<b>39.5</b>	<i>4.34</i>	<b>42.8</b>	<i>2.78</i>	<b>12.6</b>	<i>2.18</i>
<b>Mn</b>	mg/kg	14	<b>80.2</b>	<i>4.66</i>	<b>81.7</b>	<i>5.26</i>	<b>31.6</b>	<i>2.15</i>
<b>Fe</b>	mg/kg	14	<b>170</b>	<i>12.5</i>	<b>198</b>	<i>20.3</i>	<b>116</b>	<i>14.0</i>
<b>Cu</b>	mg/kg	14	<b>7.96</b>	<i>0.860</i>	<b>6.83</b>	<i>1.25</i>	<b>5.81</b>	<i>0.615</i>
<b>Mo</b>	mg/kg	5	<b>1.22</b>	<i>0.340</i>	<b>5.52</b>	<i>0.850</i>	<b>0.860</b>	<i>0.280</i>