



2019 North American Proficiency Testing Program  
Quarter 2 Plant Report - Monday, July 08, 2019

Laboratory ID  
General

Plant	Plant 2019-204				Plant 2019-205			Plant 2019-206			
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 (%)	%	22	93.9	0.635		96.3	0.725		94.9	0.550	
NO3 - N Cd Rd.	mg/kg	24	255	17.9		36.2	6.25		884	53.6	
NO3 - N ISE	mg/kg	3	345	93.5		140	24.7		1,120	119	
NO3 - N Other	mg/kg	4	283	51.9		67.8	25.0		816	135	
NH4-N	mg/kg	3	113	12.1		106	31.2		50.4	6.33	
PO4 - P	mg/kg	9	1,860	81.4		1,400	45.0		1,860	118	
SO4 - S	mg/kg	5	769	22.7		601	83.0		1,910	339	
Cl	%	21	0.160	0.030		0.280	0.020		1.15	0.080	
TKN	%	8	4.90	0.260		2.55	0.100		4.64	0.200	
N- Dry Comb.	%	63	5.10	0.070		2.71	0.047		4.98	0.070	
S- Dry Comb.	%	8	0.307	0.038		0.162	0.020		0.466	0.080	
<b>Nitric / Perchloric</b>											
P	%	28	0.420	0.020		0.260	0.009		0.359	0.012	
K	%	29	2.12	0.075		2.90	0.110		2.68	0.113	
Ca	%	29	1.14	0.034		1.20	0.035		0.906	0.020	
Mg	%	29	0.450	0.018		0.356	0.010		0.780	0.027	
S	%	28	0.300	0.018		0.153	0.007		0.471	0.025	
Na	%	23	0.006	0.001		0.020	0.001		2.92	0.116	
Al	mg/kg	19	143	30.3		21.5	3.54		82.0	10.0	
B	mg/kg	25	39.4	1.44		23.0	1.13		54.9	3.74	
Zn	mg/kg	29	46.6	2.56		18.6	0.580		43.6	2.41	
Mn	mg/kg	29	107	4.00		40.3	1.32		94.4	3.16	
Fe	mg/kg	29	245	17.0		62.7	4.70		157	15.0	
Cu	mg/kg	29	10.4	0.580		7.61	0.464		11.8	0.820	
Mo	mg/kg	10	0.658	0.089		0.860	0.127		0.637	0.137	
<b>Nitric / Peroxide- MICROWAVE</b>											
P	%	34	0.429	0.017		0.263	0.010		0.370	0.012	
K	%	34	2.15	0.060		2.98	0.095		2.70	0.130	
Ca	%	34	1.10	0.045		1.17	0.030		0.891	0.028	
Mg	%	34	0.430	0.019		0.340	0.016		0.744	0.024	
S	%	32	0.300	0.017		0.158	0.009		0.485	0.025	
Na	%	25	0.005	0.001		0.019	0.002		2.93	0.185	
Al	mg/kg	21	141	09.4		24.3	2.83		095	10.3	
B	mg/kg	34	40.1	2.13		23.1	1.46		55.7	3.55	
Zn	mg/kg	34	46.8	2.67		19.0	1.03		43.0	1.14	
Mn	mg/kg	34	105	4.82		39.9	1.74		92.0	4.50	
Fe	mg/kg	34	246	24.3		64.0	3.80		155	8.00	
Cu	mg/kg	34	10.6	0.608		7.99	0.420		12.1	0.650	
Mo	mg/kg	14	0.665	0.135		0.858	0.082		0.750	0.069	
<b>Dry Ash</b>											
P	%	11	0.429	0.029		0.255	0.015		0.360	0.010	
K	%	11	2.06	0.080		2.87	0.120		2.74	0.160	

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>	%	11	<b>1.06</b>	0.050	<b>1.16</b>	0.070	<b>0.880</b>	0.050
<b>Mg</b>	%	11	<b>0.430</b>	0.020	<b>0.340</b>	0.020	<b>0.770</b>	0.032
<b>Na</b>	%	10	<b>0.020</b>	0.003	<b>0.026</b>	0.004	<b>2.98</b>	0.332
<b>Al</b>	mg/kg	3	<b>173</b>	10.0	<b>27.3</b>	2.68	<b>130</b>	8.00
<b>B</b>	mg/kg	10	<b>38.8</b>	2.06	<b>22.0</b>	1.25	<b>52.5</b>	4.22
<b>Zn</b>	mg/kg	11	<b>47.8</b>	3.32	<b>19.0</b>	1.50	<b>44.4</b>	3.50
<b>Mn</b>	mg/kg	11	<b>101</b>	5.14	<b>38.9</b>	3.22	<b>90.2</b>	6.73
<b>Fe</b>	mg/kg	11	<b>263</b>	8.00	<b>65.4</b>	2.93	<b>165</b>	5.55
<b>Cu</b>	mg/kg	11	<b>10.4</b>	0.740	<b>8.10</b>	0.680	<b>11.3</b>	0.677
<b>Mo</b>	mg/kg	4	<b>0.715</b>	0.076	<b>0.934</b>	0.035	<b>0.670</b>	0.178