



**2011 North American Proficiency Testing Program**  
**1st Quarter Report - May 9, 2011**

**Laboratory ID**  
**general**

Plant		Plant 2011-201					Plant 2011-202					Plant 2011-203				
Analysis	Units	n	Median	MAD	Lab <sup>1,2</sup>		Median	MAD	Lab <sup>1,2</sup>		Median	MAD	Lab <sup>1,2</sup>			
Dry Matter (%)	%	27	91.2	6.68			90.2	6.87			90.0	6.85				
NO <sub>3</sub> - N Cd Rd.	mg/kg	25	50.0	24.6			618	141.6			216.9	73.1				
NO <sub>3</sub> - N ISE	mg/kg	3	116.6	27.7			944	181.5			278.7	42.8				
NO <sub>3</sub> - N Other	mg/kg	3	131	148			585	75			221	9.500				
NH <sub>4</sub> -N	mg/kg	2	182.3	82.3			113	3			92.6	61.591				
PO <sub>4</sub> - P	mg/kg	11	1382	169			652	234			406	117				
SO <sub>4</sub> - S	mg/kg	4	497	115			369	97			340	113				
Cl	%	23	0.250	0.048			0.259	0.035			0.310	0.069				
TKN	%	13	1.81	0.146			1.56	0.245			2.47	0.364				
N- Dry Comb.	%	51	1.79	0.059			1.50	0.085			2.78	0.121				
S- Dry Comb.	%	10	0.157	0.036			0.134	0.035			0.178	0.041				
<b>Nitric / Perchloric</b>																
P	%	27	0.302	0.135			0.280	0.129			0.156	0.057				
K	%	27	1.36	0.620			1.46	0.664			2.216	0.888				
Ca	%	27	0.72	0.309			0.34	0.165			4.297	1.926				
Mg	%	26	0.236	0.101			0.367	0.159			0.939	0.397				
S	%	26	0.200	0.082			0.166	0.069			0.235	0.094				
Na	%	19	16.424	29.363			12.339	23.367			25.387	48.320				
Al	mg/kg	13	389.2	101.3			31	8			59	18.5				
B	mg/kg	22	18.3	1.93			6.4	1.26			37.5	3.20				
Zn	mg/kg	26	34.6	1.97			23.2	3.28			28.1	2.36				
Mn	mg/kg	26	122.1	6.05			44.6	16.17			59	3.9				
Fe	mg/kg	26	549.9	67.0			220	238.4			93.4	10.8				
Cu	mg/kg	27	35.22	25.688			8.4	6.51			5.01	0.761				
Mo	mg/kg	6	2.203	0.158			0.72	0.745			0.253	0.327				
<b>Nitric / Perchloric- MICROWAVE</b>																
P	%	20	0.235	0.021			0.226	0.016			0.135	0.016				
K	%	20	1.10	0.140			1.15	0.098			1.699	0.150				

1 - Values flagged exceed Warning Limits " \* " 2.5 x MAD (Median Absolute Deviation) and Control Limits " \*\* " 4 x MAD. "<" and "ND" values not recorded.

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



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Ca	%	20	<b>0.71</b>	0.243		<b>0.28</b>	0.042		<b>3.037</b>	0.596		
Mg	%	20	<b>0.198</b>	0.051		<b>0.277</b>	0.025		<b>0.695</b>	0.071		
S	%	20	<b>0.155</b>	0.013		<b>0.132</b>	0.010		<b>0.171</b>	0.017		
Na	%	16	<b>0.019</b>	0.014		<b>0.013</b>	0.010		<b>0.045</b>	0.013		
Al	mg/kg	13	<b>501.9</b>	124.9		<b>38</b>	12.4		<b>82</b>	25.4		
B	mg/kg	19	<b>21.0</b>	2.89		<b>7.8</b>	2.17		<b>38.9</b>	3.35		
Zn	mg/kg	20	<b>36.2</b>	4.54		<b>23.7</b>	2.49		<b>29.8</b>	4.83		
Mn	mg/kg	20	<b>116.0</b>	17.11		<b>41.2</b>	8.71		<b>58</b>	5.7		
Fe	mg/kg	20	<b>546.4</b>	116.83		<b>111</b>	49.2		<b>94.6</b>	11.1		
Cu	mg/kg	20	<b>22.33</b>	3.816		<b>6.4</b>	1.77		<b>5.53</b>	0.746		
Mo	mg/kg	9	<b>1.831</b>	0.425		<b>0.44</b>	0.257		<b>0.157</b>	0.182		
<b>Dry Ash</b>												
P	%	20	<b>0.245</b>	0.027		<b>0.233</b>	0.031		<b>0.144</b>	0.022		
K	%	21	<b>0.90</b>	0.114		<b>1.25</b>	0.203		<b>1.847</b>	0.195		
Ca	%	21	<b>0.58</b>	0.069		<b>0.33</b>	0.133		<b>3.515</b>	0.477		
Mg	%	21	<b>0.177</b>	0.030		<b>0.302</b>	0.045		<b>0.786</b>	0.112		
Na	%	16	<b>0.015</b>	0.008		<b>0.024</b>	0.024		<b>0.051</b>	0.015		
Al	mg/kg	6	<b>419.7</b>	81.80		<b>57</b>	30.1		<b>107</b>	28.2		
B	mg/kg	21	<b>19.0</b>	3.37		<b>8.8</b>	2.84		<b>41.9</b>	4.80		
Zn	mg/kg	20	<b>29.1</b>	7.52		<b>25.1</b>	4.31		<b>33.1</b>	6.86		
Mn	mg/kg	20	<b>110.9</b>	12.77		<b>38.3</b>	6.68		<b>62</b>	7.7		
Fe	mg/kg	20	<b>433.0</b>	151.02		<b>132</b>	71.1		<b>90.7</b>	16.1		
Cu	mg/kg	20	<b>10.54</b>	4.664		<b>8.3</b>	5.00		<b>6.60</b>	2.41		
Mo	mg/kg	6	<b>2.01</b>	0.482		<b>0.46</b>	0.227		<b>1.73</b>	2.228		

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