

1998 Interim North American Proficiency Testing Program

November 2, 1998

3rd Quarter Results

Plant ID - 98207

Plant	Sample		Descriptive		Statistics			Lab ID
Analysis	Units	No.	Min	Max	Median	MAD ¹	RMD %	% Values < WL ²
Dry Matter	%	13	90.0	95.6	92.7	1.3	1.4	96.0
NO₃ - N Cd Rd.	mg/kg	22	0.1	1569	890	110	12.4	81.8
NO₃ - N ISE	mg/kg	18	543	15200	1320	151	11.4	72.2
NO₃ - N Oth.	mg/kg	6	610	1000	810	92	11.3	100.0
PO₄ - P	mg/kg	20	782	1965	1370	123	9.0	85.0
SO₄ - S	mg/kg	6	180	6624	2250	1257	55.9	83.3
Cl	%	20	0.41	0.86	0.50	0.05	10.1	95.0
TKN	%	38	1.16	9.53	1.60	0.08	5.0	78.9
N- Dry Comb.	%	48	1.52	10.1	1.70	0.07	4.4	89.6
S- Dry Comb.	%	14	0.03	0.18	0.118	0.015	12.7	85.7
Nitric / Perchloric								
P	%	41	0.16	2.83	0.210	0.011	5.2	65.9
K	%	41	0.22	3.3	2.83	0.197	6.9	90.2
Ca	%	42	0.14	0.5	0.21	0.016	7.6	76.2
Mg	%	40	0.24	0.35	0.30	0.020	6.7	90.0
S	%	38	0.10	1485	0.120	0.010	8.3	86.8
Na	mg/kg	28	0.0	950	39	38	98.2	75.0
B	mg/kg	29	0.9	46	14.0	2.2	15.5	65.5
Zn	mg/kg	41	9.0	50	27.0	2.0	7.4	82.9
Mn	mg/kg	39	40	170	50	3.0	6.1	76.9
Fe	mg/kg	39	4	270	190	12	6.4	84.6
Cu	mg/kg	39	1.5	14	5.1	0.9	17.6	76.9
Dry Ash								
P	%	40	0.17	1.02	0.210	0.010	4.8	80.0
K	%	39	2.12	4.98	2.90	0.16	5.3	84.6
Ca	%	39	0.07	1.83	0.22	0.030	13.6	87.2
Mg	%	39	0.10	1.4	0.31	0.020	6.5	87.2
Na	mg/kg	29	0.0	13000	120	96	80.2	79.3
B	mg/kg	42	3.8	54	13.2	1.3	9.7	71.4
Zn	mg/kg	40	21.0	98	28.0	2.1	7.3	85.0
Mn	mg/kg	41	41.6	420	52	2.1	4.0	70.7
Fe	mg/kg	39	111	750	179	25	14.0	92.3
Cu	mg/kg	40	3	37	5.0	0.9	17.2	87.5
Microwave								
P	%	14	0.00	0.24	0.218	0.011	5.0	92.9
K	%	14	2.26	3.54	3.00	0.11	3.6	64.3
Ca	%	14	0.18	0.29	0.24	0.019	7.7	85.7
Mg	%	14	0.26	0.37	0.33	0.020	6.0	85.7
S	%	12	0.1	1304	0.124	0.009	7.3	83
Na	mg/kg	10	17	765	109	41	37.5	60.0
B	mg/kg	12	3.7	47	13.1	1.9	14.5	66.7
Zn	mg/kg	13	17.8	47	30.0	3.8	12.6	76.9
Mn	mg/kg	13	27	64	50	3.0	6.0	61.5
Fe	mg/kg	13	2	228	198	13	6.7	84.6
Cu	mg/kg	13	3.84	10	5.5	1.3	23.6	76.9

1 - Values flagged exceed Warning Limits " * " based on 2.5 x MAD (Median Absolute Deviation) and Control Limits " * * " based on 4 x MAD.
 2 - Percentage (%) of all reported laboratory values within established Warning Limits.

1998 Interim North American Proficiency Testing Program

November 2, 1998

3rd Quarter Results

Plant ID - 98208

Plant	Sample		Descriptive		Statistics			Lab ID
Analysis	Units	No.	Min	Max	Median	MAD ¹	RMD %	% Values < WL ²
Dry Matter	%	15	90.9	95.6	92.9	0.9	1.0	95.2
NO₃ - N Cd Rd.	mg/kg	25	0.5	7739	4920	419	8.5	68.0
NO₃ - N ISE	mg/kg	19	3766	64550	5950	643	10.8	95.8
NO₃ - N Oth.	mg/kg	7	3680	4990	4700	266	5.7	90.0
PO₄ - P	mg/kg	21	5123	12367	10460	1211	11.6	70.8
SO₄ - S	mg/kg	8	13	10078	2470	528	21.4	85.7
Cl	%	23	0.1	4.815	0.22	0.04	15.9	75.0
TKN	%	38	3.73	40.08	6.50	0.22	3.3	81.0
N- Dry Comb.	%	50	0.93	43.16	7.04	0.18	2.6	78.4
S- Dry Comb.	%	14	0.35	4.30	0.638	0.071	11.2	70.6
Nitric / Perchloric								
P	%	43	0.13	2.13	1.36	0.110	8.1	83.7
K	%	41	2.38	5.41	4.43	0.350	7.9	86.7
Ca	%	42	0.65	1.0	0.82	0.060	7.3	84.1
Mg	%	41	0.29	0.47	0.40	0.020	5.0	88.4
S	%	36	0.05	7916	0.630	0.035	5.6	79.5
Na	mg/kg	30	0.0	29832	149	49	32.9	73.5
B	mg/kg	31	0.9	65	32.8	2.2	6.6	70.0
Zn	mg/kg	41	53	136	109	6.5	6.0	78.0
Mn	mg/kg	39	134	213	172	12.0	7.0	82.5
Fe	mg/kg	39	79	237	186	15	8.1	77.5
Cu	mg/kg	40	17.0	40	29.0	2.2	7.6	80.5
Dry Ash		0						
P	%	41	0.16	1.5	1.37	0.080	5.8	92.7
K	%	40	1.30	5.24	4.44	0.26	5.9	80.9
Ca	%	40	0.40	1.09	0.81	0.060	7.4	83.0
Mg	%	40	0.22	0.9	0.40	0.023	5.7	80.4
Na	mg/kg	29	99	11300	249	118	47.4	79.4
B	mg/kg	43	20.3	44	32.2	2.1	6.4	77.1
Zn	mg/kg	40	13.0	165	108	9.1	8.4	85.4
Mn	mg/kg	42	12.9	204	153	27.0	17.6	83.3
Fe	mg/kg	40	73	331	186	18	9.7	89.1
Cu	mg/kg	41	3.98	163	28.5	1.7	6.0	73.9
Microwave								
P	%	14	1.34	1.63	1.50	0.048	3.2	100.0
K	%	15	3.59	5.05	4.70	0.09	2.0	100.0
Ca	%	15	0.70	1.02	0.86	0.059	6.9	86.7
Mg	%	15	0.35	0.47	0.42	0.025	6.0	93.3
S	%	13	0.6	6452	0.700	0.062	8.9	85
Na	mg/kg	11	97	850	167	68	41.0	100.0
B	mg/kg	13	11.7	45	32.7	4.0	12.2	78.6
Zn	mg/kg	14	64.5	130	113	7.0	6.2	80.0
Mn	mg/kg	14	95	218	186	20.5	11.0	80.0
Fe	mg/kg	14	98	226	200	14	7.1	80.0
Cu	mg/kg	14	17	35	31.7	1.8	5.7	71.4

1 - Values flagged exceed Warning Limits " ** " based on 2.5 x MAD (Median Absolute Deviation) and Control Limits " *** " based on 4 x MAD.

2 - Percentage (%) of all reported laboratory values within established Warning Limits.

1998 Interim North American Proficiency Testing Program

November 2, 1998

3rd Quarter Results

Plant ID - 98209

Plant	Sample		Descriptive		Statistics			Lab ID
Analysis	Units	No.	Min	Max	Median	MAD ¹	RMD %	% Values < WL ²
Dry Matter	%	20	85.6	94.9	90.2	1.7	1.9	89.6
NO ₃ - N Cd Rd.	mg/kg	30	0.5	7152	4660	360	7.7	86.7
NO ₃ - N ISE	mg/kg	24	3115	66550	5100	500	9.8	96.9
NO ₃ - N Oth.	mg/kg	12	4092	4860	4140	45	1.1	93.8
PO ₄ - P	mg/kg	25	727	1869	1470	166	11.3	83.9
SO ₄ - S	mg/kg	13	140	6610	1780	625	35.1	86.7
Cl	%	27	0.99	5.24	4.48	0.28	6.3	86.7
TKN	%	45	0.80	7.03	1.18	0.08	6.9	85.7
N- Dry Comb.	%	56	1.17	8.64	1.45	0.06	4.1	93.1
S- Dry Comb.	%	19	0.02	0.16	0.063	0.014	21.4	95.8
Nitric / Perchloric								
P	%	46	0.15	0.50	0.200	0.010	5.0	84.3
K	%	46	1.51	2.86	2.23	0.155	7.0	86.8
Ca	%	46	0.20	1.1	0.97	0.05	5.7	80.8
Mg	%	45	0.28	0.48	0.42	0.02	5.6	92.2
S	%	41	0.02	868	0.060	0.01	16.7	76.9
Na	mg/kg	36	0.0	30000	25500	1442	5.7	85.4
B	mg/kg	37	0.1	59	28.3	2.5	8.8	89.5
Zn	mg/kg	46	3.90	33	14.1	1.9	13.5	91.8
Mn	mg/kg	45	5.0	16	13.0	1.0	7.7	91.7
Fe	mg/kg	45	39	137	84	8.1	9.7	83.3
Cu	mg/kg	46	0.0	13	4.0	0.4	10.8	85.7
Dry Ash								
P	%	48	0.16	0.25	0.200	0.010	5.0	90.7
K	%	47	0.50	4.36	2.27	0.15	6.6	94.4
Ca	%	47	0.50	1.91	0.97	0.07	7.2	79.6
Mg	%	47	0.25	1.4	0.41	0.030	7.3	85.2
Na	mg/kg	35	0.10	33994	26000	1636	6.3	90.2
B	mg/kg	50	16.9	133	28.0	2.0	7.1	76.4
Zn	mg/kg	48	6.0	47	15.0	2.1	14.0	89.1
Mn	mg/kg	49	7.6	182	13.3	1.1	8.4	98.2
Fe	mg/kg	47	47	1280	83	15	17.6	94.3
Cu	mg/kg	48	2.6	41	4.6	0.8	16.9	78.8
Microwave								
P	%	13	0.17	0.26	0.200	0.010	5.0	84.6
K	%	14	2.03	2.90	2.36	0.10	4.3	64.3
Ca	%	14	0.88	1.17	1.02	0.07	6.4	85.7
Mg	%	14	0.38	0.52	0.45	0.03	5.9	100.0
S	%	12	0.1	797	0.072	0.008	11.2	83
Na	mg/kg	10	23420	33448	28670	2890	10.1	83.3
B	mg/kg	12	7.1	37	28.6	2.8	9.6	84.6
Zn	mg/kg	13	8.1	19	14.9	1.7	11.4	85.7
Mn	mg/kg	13	6	19	13.4	1.3	9.7	92.9
Fe	mg/kg	13	45	94	89	3.2	3.6	78.6
Cu	mg/kg	13	3	92	4.5	1.4	30.9	78.6

1 - Values flagged exceed Warning Limits " * " based on 2.5 x MAD (Median Absolute Deviation) and Control Limits " ** " based on 4 x MAD.

2 - Percentage (%) of all reported laboratory values within established Warning Limits.