MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Method	AOAC Ref.	Method Code	Pass 1 Results for 83 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	Pass 2 Results for 82 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Ammoniacal Nitrogen, MgO Distillation .	920.03	001.10	9	12.067	0.5471	0.0717	9	12.067	0.5471	0.0717
Ammoniacal Nitrogen, Other		001.99	6	12.133	0.0894	0.0433	6	12.133	0.0894	0.0433
Method Group 001.XX PCT			17	12.109	0.4741	0.0585	16	12.172	0.4109	0.0497
Nitrate Nitrogen, Robertson	930.01	002.10	1	1.2100	0.0141	0.0200	1	1.2100	0.0141	0.0200
Nitrate Nitrogen, Other		002.99	9	1.3576	0.1281	0.0381	8	1.3717	0.1234	0.0166
Method Group 002.XX PCT			10	1.3429	0.1294	0.0363	9	1.3537	0.1272	0.0170
Nitrogen From Urea, Urease (as N)	959.03	005.00	1	13.915	0.0354	0.0500	1	13.915	0.0354	0.0500
Ammon & Nitrate N, Devarda	892.01	009.10	6	13.493	0.1232	0.0817	6	13.493	0.1232	0.0817
Ammon & Nitrate N, Other		009.99	1	13.570	0.0990	0.1400	1	13.570	0.0990	0.1400
Method Group 009.XX PCT			7	13.504	0.1200	0.0900	7	13.504	0.1200	0.0900
Total Nitrogen, Modified Comprehensive	978.02	010.11	8	13.630	0.2143	0.0466	8	13.630	0.2143	0.0466
Total Nitrogen, Salicylic	955.04D	010.12	6	13.477	0.2203	0.0636	5	13.441	0.2169	0.0249
Total Nitrogen, Combustion		010.60	45	13.592	0.1436	0.0741	42	13.590	0.1381	0.0537
Total Nitrogen, Other		010.99	2	13.425	0.1256	0.1135	2	13.425	0.1256	0.1135
Method Group 010.XX PCT			63	13.580	0.1895	0.0698	59	13.577	0.1891	0.0519
Total Phosphate, Grav Quimociac	962.02	020.10	6	4.2709	0.1032	0.0674	6	4.2709	0.1032	0.0674
Total Phosphate, Spectrometric	958.01	020.20	16	4.3119	0.0913	0.0515	15	4.3053	0.0788	0.0323
Total Phosphate, Alka. Quimociac	969.02	020.30	1	4.2552	0.0001	0.0001	1	4.2552	0.0001	0.0001
Total Phosphate, Automated	978.01	020.40	5	4.2100	0.1260	0.0280	5	4.2100	0.1260	0.0280
Total Phosphate, ICP		020.50	1	4.2600	0.0283	0.0400	1	4.2600	0.0283	0.0400
Total Phosphate, Other		020.99	1	4.2750	0.0495	0.0700	1	4.2750	0.0495	0.0700
Method Group 020.XX PCT			30	4.2818	0.1013	0.0493	27	4.2832	0.0750	0.0318
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	2	0.0175	0.0206	0.0050	2	0.0175	0.0206	0.0050
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	0.0400	0.0000	0.0000	1	0.0400	0.0000	0.0000
Insoluble Phosphate, Automated	978.01	030.40	2	0.0250	0.0100	0.0100	2	0.0250	0.0100	0.0100
Insoluble Phosphate, Other		030.99	1	0.0600	0.0141	0.0200	1	0.0600	0.0141	0.0200
Method Group 030.XX PCT			6	0.0308	0.0202	0.0083	6	0.0308	0.0202	0.0083
InDir Available Phosphate, Grav Quim ..	960.02	040.10	2	4.2425	0.0974	0.0850	2	4.2425	0.0974	0.0850
InDir Available Phosphate, Spectrometri	960.02	040.20	3	4.1717	0.0534	0.0167	3	4.1717	0.0534	0.0167
InDir Available Phosphate, Automated ..	960.02	040.40	2	4.1150	0.1794	0.0700	2	4.1150	0.1794	0.0700
InDir Available Phosphate, Other		040.99	2	4.2025	0.0395	0.0450	2	4.2025	0.0395	0.0450
Method Group 040.XX PCT			9	4.1817	0.1026	0.0500	9	4.1817	0.1026	0.0500
Dir Available Phosphate, Grav Quim	960.03E	041.10	17	4.2239	0.0890	0.0712	16	4.2248	0.0795	0.0531
Dir Available Phosphate, Spectrometric	960.03D	041.20	3	4.1667	0.0942	0.0248	3	4.1667	0.0942	0.0248
Dir Available Phosphate, Alka. Quim ...	960.03C	041.30	1	4.1300	0.0424	0.0600	1	4.1300	0.0424	0.0600
Dir Available Phosphate, Automated	978.01	041.40	4	4.2456	0.0697	0.0388	4	4.2456	0.0697	0.0388
Dir Available Phosphate, ICP		041.50	7	4.1254	0.1675	0.0410	6	4.0846	0.1399	0.0245
Dir Available Phosphate, EDTA Extract .	993.01	041.60	12	4.2263	0.1014	0.0599	11	4.2387	0.0916	0.0472
Dir Available Phosphate, Other		041.99	2	4.0895	0.2492	0.0220	2	4.0895	0.2492	0.0220

Method	AOAC Ref.	Method Code	- Pass 1 Results for 83 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 82 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Method Group 041.XX PCT			46	4.1998	0.1207	0.0554	43	4.2001	0.1176	0.0409
Water Soluble Phosphate, Spectrometric	970.01	048.20	3	3.6333	0.2223	0.0067	3	3.6333	0.2223	0.0067
Soluble Potash, STPB Oxalate	958.02	050.00	21	14.444	0.1627	0.0785	21	14.444	0.1627	0.0785
Soluble Potash, STPB Citrate	969.04	050.10	2	14.557	0.2686	0.1540	2	14.557	0.2686	0.1540
Soluble Potash, AA (Oxalate)		050.30	12	14.483	0.4456	0.1389	12	14.483	0.4456	0.1389
Soluble Potash, AA (Citrate)		050.31	1	14.395	0.3041	0.4300	1	14.395	0.3041	0.4300
Soluble Potash, ICP (Oxalate)		050.50	5	14.039	0.3105	0.0482	5	14.039	0.3105	0.0482
Soluble Potash, ICP (Citrate)		050.51	6	14.383	0.2875	0.1133	6	14.383	0.2875	0.1133
Soluble Potash, Flame (Oxalate)	983.02(a	050.60	5	14.319	0.6273	0.1388	5	14.319	0.6273	0.1388
Soluble Potash, Flame (Citrate)	983.02(b	050.61	9	14.460	0.2839	0.2022	8	14.468	0.2623	0.1263
Soluble Potash, Other		050.99	12	14.473	0.4240	0.1699	10	14.510	0.2999	0.0839
Method Group 050.XX PCT			74	14.429	0.3675	0.1288	69	14.436	0.3514	0.0962
Free Water, Vacuum Oven	965.08B	060.00	5	0.3483	0.1401	0.0296	4	0.3379	0.1546	0.0120
Free Water, Vacuum Desiccate	965.08A	060.10	1	0.3400	0.0424	0.0600	1	0.3400	0.0424	0.0600
Free Water, Other		060.99	1	0.4450	0.0071	0.0100	1	0.4450	0.0071	0.0100
Method Group 060.XX PCT			7	0.3609	0.1225	0.0311	7	0.3609	0.1225	0.0311
Acid Soluble Calcium, AA	945.04	101.00	3	1.7191	0.0234	0.0197	3	1.7191	0.0234	0.0197
Acid Soluble Calcium, ICP		101.30	11	1.7210	0.1224	0.0305	11	1.7210	0.1224	0.0305
Acid Soluble Calcium, Other		101.99	1	1.7030	0.1400	0.1980	1	1.7030	0.1400	0.1980
Method Group 101.XX PCT			15	1.7194	0.1079	0.0395	14	1.7206	0.1085	0.0282
Acid Soluble Magnesium, AA	984.01	121.00	19	0.9308	0.0822	0.0157	19	0.9308	0.0822	0.0157
Acid Soluble Magnesium, ICP		121.30	17	0.9315	0.0657	0.0193	16	0.9201	0.0474	0.0174
Acid Soluble Magnesium, Other		121.99	1	0.9650	0.0354	0.0500	1	0.9650	0.0354	0.0500
Method Group 121.XX PCT			37	0.9321	0.0737	0.0183	35	0.9376	0.0650	0.0171
Water Soluble Magnesium, AA		131.00	3	0.8510	0.0207	0.0047	3	0.8510	0.0207	0.0047
Water Soluble Magnesium, ICP		131.30	2	0.7932	0.0110	0.0097	2	0.7932	0.0110	0.0097
Water Soluble Magnesium, Other		131.99	1	0.8550	0.0071	0.0100	1	0.8550	0.0071	0.0100
Method Group 131.XX PCT			6	0.8324	0.0328	0.0072	6	0.8324	0.0328	0.0072
Sulfur, Gravimetric	980.02a	144.01	11	14.309	0.2193	0.0882	11	14.309	0.2193	0.0882
Sulfur, Gravimetric	980.02b	144.02	2	13.760	0.2156	0.0500	2	13.760	0.2156	0.0500
Sulfur, Turbidimetric	63.845	144.50	1	13.825	0.2475	0.3500	1	13.825	0.2475	0.3500
Sulfur, Other		144.99	12	14.120	0.6723	0.1741	10	14.078	0.5821	0.0549
Method Group 144.XX PCT			27	14.137	0.5101	0.1314	25	14.122	0.4491	0.0804
Arsenic, Atomic Absorption		151.00	1	1.7000	0.0283	0.0400	1	1.7000	0.0283	0.0400
Arsenic, ICP		151.30	1	0.4150	0.1061	0.1500	1	0.4150	0.1061	0.1500
Arsenic, Other		151.99	3	1.8183	0.2555	0.0767	3	1.8183	0.2555	0.0767
Method Group 151.XX PPM			5	1.5140	0.6127	0.0840	5	1.5140	0.6127	0.0840
Acid Soluble Boron, Spectrometric	982.01	165.00	8	0.1580	0.0123	0.0045	8	0.1580	0.0123	0.0045
Acid Soluble Boron, Titrimetric	949.02	165.70	2	0.1556	0.0116	0.0053	2	0.1556	0.0116	0.0053

Method	AOAC Ref.	Method Code	- Pass 1 Results for 83 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 82 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Acid Soluble Boron, Other		165.99	8	0.1546	0.0140	0.0052	8	0.1546	0.0140	0.0052
Method Group 165.XX PCT			18	0.1562	0.0128	0.0049	17	0.1564	0.0130	0.0042
Water Soluble Boron, Spectrometric	982.01	171.10	1	0.1500	0.0000	0.0000	1	0.1500	0.0000	0.0000
Water Soluble Boron, Other		171.99	1	0.1300	0.0014	0.0020	1	0.1300	0.0014	0.0020
Method Group 171.XX PCT			2	0.1400	0.0116	0.0010	2	0.1400	0.0116	0.0010
Cadmium, Atomic Absorption		181.00	3	1.0033	0.2927	0.1400	3	1.0033	0.2927	0.1400
Cadmium, ICP		181.30	6	0.9933	0.1515	0.0286	5	0.9619	0.1447	0.0143
Cadmium, Other		181.99	1	1.0000	0.0000	0.0000	1	1.0000	0.0000	0.0000
Method Group 181.XX PPM			10	0.9970	0.1893	0.0591	9	0.9633	0.1528	0.0213
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	5	9.9575	0.2424	0.0386	5	9.9575	0.2424	0.0386
Water Soluble Chlorine, Other		190.99	5	10.019	0.2325	0.0781	5	10.019	0.2325	0.0781
Method Group 190.XX PCT			10	9.9884	0.2333	0.0584	10	9.9884	0.2333	0.0584
Chromium, Atomic Absorption		191.00	3	41.200	4.3174	2.4000	3	41.200	4.3174	2.4000
Chromium, ICP		191.30	2	29.179	3.8262	1.3428	2	29.179	3.8262	1.3428
Method Group 191.XX PPM			5	36.392	7.3329	1.9771	5	36.392	7.3329	1.9771
Acid Soluble Cobalt, AA		202.00	4	13.224	4.1557	1.7633	4	13.224	4.1557	1.7633
Acid Soluble Cobalt, ICP	965.11	202.30	6	9.2482	3.6308	1.6060	6	9.2482	3.6308	1.6060
Acid Soluble Cobalt, Other		202.99	2	10.250	4.4253	1.5000	2	10.250	4.4253	1.5000
Method Group 202.XX PPM			12	10.740	4.1790	1.6408	12	10.740	4.1790	1.6408
Acid Soluble Copper, Atomic Absorption	975.01	221.00	5	0.0050	0.0006	0.0002	5	0.0050	0.0006	0.0002
Acid Soluble Copper, ICP		221.30	12	0.0046	0.0006	0.0003	12	0.0046	0.0006	0.0003
Acid Soluble Copper, Other		221.99	2	0.0058	0.0012	0.0001	2	0.0058	0.0012	0.0001
Method Group 221.XX PCT			20	0.0050	0.0009	0.0002	20	0.0050	0.0009	0.0002
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	16	0.3195	0.0953	0.0187	15	0.3165	0.0963	0.0113
Acid Soluble Iron, ICP		241.30	16	0.2581	0.0981	0.0172	14	0.2607	0.0962	0.0082
Acid Soluble Iron, Other		241.99	2	0.2265	0.0842	0.0408	2	0.2265	0.0842	0.0408
Method Group 241.XX PCT			34	0.2851	0.1005	0.0193	31	0.2870	0.0996	0.0115
Lead, Atomic Absorption		251.00	1	3.7900	0.0141	0.0200	1	3.7900	0.0141	0.0200
Lead, ICP		251.30	5	5.9989	2.4022	0.7004	5	5.9989	2.4022	0.7004
Lead, Other		251.99	2	6.0875	2.3546	1.0350	2	6.0875	2.3546	1.0350
Method Group 251.XX PPM			8	5.7449	2.2705	0.6990	8	5.7449	2.2705	0.6990
Acid Soluble Manganese, AA	972.02a	261.00	17	0.2365	0.0124	0.0080	17	0.2365	0.0124	0.0080
Acid Soluble Manganese, AA	972.02b	261.11	2	0.2285	0.0156	0.0210	2	0.2285	0.0156	0.0210
Acid Soluble Manganese, ICP	972.02a	261.30	14	0.2377	0.0184	0.0067	14	0.2377	0.0184	0.0067
Acid Soluble Manganese, Other		261.99	1	0.2400	0.0000	0.0000	1	0.2400	0.0000	0.0000
Method Group 261.XX PCT			34	0.2366	0.0151	0.0080	33	0.2371	0.0148	0.0073
Water Soluble Manganese, Atomic Abs. ..	972.03	271.00	2	0.0567	0.0008	0.0002	2	0.0567	0.0008	0.0002
Mercury, ICP		281.30	1	27.250	1.0607	1.5000	1	27.250	1.0607	1.5000
Molybdenum, ICP		289.30	6	2.3650	0.5530	0.3133	6	2.3650	0.5530	0.3133

Method	AOAC Ref.	Method Code	- Pass 1 Results for 83 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 82 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Molybdenum, Other		289.99	1	2.5000	0.7071	1.0000	1	2.5000	0.7071	1.0000
Method Group 289.XX PPM			7	2.3843	0.5474	0.4114	7	2.3843	0.5474	0.4114
Nickel, Atomic Absorption		291.00	4	24.548	3.6137	2.7113	4	24.548	3.6137	2.7113
Nickel, ICP		291.30	5	23.678	2.6462	1.7984	5	23.678	2.6462	1.7984
Nickel, Other		291.99	2	25.450	8.7805	1.8000	2	25.450	8.7805	1.8000
Method Group 291.XX PPM			11	24.316	4.3390	2.1306	11	24.316	4.3390	2.1306
Selenium, ICP		301.30	1	10.500	0.7071	1.0000	1	10.500	0.7071	1.0000
Selenium, Other		301.99	2	0.1775	0.0838	0.0050	2	0.1775	0.0838	0.0050
Method Group 301.XX PPM			3	3.6183	5.3403	0.3367	3	3.6183	5.3403	0.3367
Sodium, Atomic Absorption	983.04	311.00	1	0.4950	0.0042	0.0060	1	0.4950	0.0042	0.0060
Sodium, Other		311.99	2	0.4205	0.0199	0.0056	2	0.4205	0.0199	0.0056
Method Group 311.XX PCT			3	0.4453	0.0415	0.0057	3	0.4453	0.0415	0.0057
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	15	0.2990	0.0291	0.0247	14	0.2981	0.0241	0.0171
Acid Soluble Zin, ICP		321.30	18	0.3227	0.0292	0.0184	17	0.3217	0.0288	0.0159
Acid Soluble Zinc, Other		321.99	2	0.2925	0.0389	0.0263	2	0.2925	0.0389	0.0263
Method Group 321.XX PCT			36	0.3116	0.0330	0.0240	34	0.3108	0.0301	0.0183
Water Soluble Zinc, Atomic Absorption .		325.00	1	0.0880	0.0000	0.0000	1	0.0880	0.0000	0.0000

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 001.10	--
415	12.751	1.25
372	12.670	1.10
029	12.425	.65
288	12.340	.50
200	12.085	.12
Avg	12.067	
262	12.000	-.12
324	11.880	-.36
389	11.350	-1.31
309	11.100	-1.78
--	Method 001.99	--
418	12.955 s	9.20
289	12.235	1.15
320	12.215	.92
394	12.140	.79
247	12.140	.13
Avg	12.133	
300	12.065	-.78
193	12.005	-1.45
409	11.490 s	-7.20
--	Method 001.XX	--
418	12.955	1.91
415	12.751	1.41
372	12.670	1.21
029	12.425	.62
288	12.340	.41
289	12.235	.16
320	12.215	.11
Avg	12.172	
247	12.140	-.08
394	12.140	-.19
300	12.065	-.26
200	12.085	-.26
193	12.005	-.41
262	12.000	-.42
324	11.880	-.72
--	Method 001.XX	--
409	11.490	-1.66
389	11.350	-2.00
309	11.100 R	-2.62
--	Method 002.10	--
372	1.2100	.71
--	Method 002.99	--
029	1.6150 X	1.98
300	1.4450	.60
394	1.4300	.47
360	1.4100	.32
Avg	1.3717	
200	1.2900	-.67
247	1.2800	-.75
393	1.2585	-.92
288	1.2450	-1.03
289	1.2450 R	-1.33
--	Method 002.XX	--
029	1.6150 X	2.06
300	1.4450	.72
394	1.4300	.60
360	1.4100	.45
Avg	1.3537	
200	1.2900	-.51
247	1.2800	-.58
393	1.2585	-.75
288	1.2450	-.86
372	1.2100	-1.13
289	1.2450 R	-1.19
--	Method 005.00	--
372	13.915	.71
--	Method 009.10	--
090	13.655	1.37
391	13.500	.81
--	Method 009.10	--
392	13.565	.60
030	13.500	.06
Avg	13.493	
258	13.390	-.83
257	13.345	-1.38
040	11.950 S	-12.52
--	Method 009.99	--
394	13.570	.71
--	Method 009.XX	--
090	13.655	1.32
394	13.570	.80
392	13.565	.53
Avg	13.504	
030	13.500	-.03
391	13.500	-.83
258	13.390	-.95
257	13.345	-1.50
040	11.950 s	-12.96
--	Method 010.10	--
072	12.870 S	.00
Avg	0.0000	
--	Method 010.11	--
090	13.985	1.66
322	13.918	1.34
405	13.690	.31
Avg	13.630	
029	13.615	-.08
200	13.515	-.54
211	13.485	-.69
288	13.445	-.87
414	13.390	-1.15
309	12.600 s	-4.83
--	Method 010.12	--
416	14.696 s	5.79
137	13.705	1.22
415	13.657 R	1.16
102	13.670	1.06
Avg	13.441	
351	13.323	-.55
185	13.290	-.70
254	13.215	-1.05
398	11.640 s	-8.31
--	Method 010.60	--
372	14.105 s	3.73
292	13.980	2.82
072	13.895	2.21
262	13.700 R	1.65
095	13.800	1.56
394	13.800	1.53
027	13.773	1.35
022	13.650 R	1.17
041	13.725	.98
389	13.710	.88
035	13.700	.87
073	13.700	.82
330	13.655	.57
131	13.655	.57
232	13.645	.40
325	13.635	.34
275	13.630	.32
028	13.620	.31
157	13.630	.29
136	13.625	.27
361	13.605	.15
024	13.605	.15
Avg	13.590	
247	13.580	-.10
377	13.575	-.21
233	13.560	-.23
231	13.550	-.29
--	Method 010.60	--
409	13.550	-.30
025	13.560	-.31
029	13.535	-.41
042	13.550	-.47
034	13.520	-.55
296	13.505	-.62
234	13.510	-.62
070	13.505	-.74
324	13.495	-.74
086	13.480	-.80
040	13.480	-.80
023	13.475	-.87
037	13.540	-.88
106	13.465	-.96
055	13.460	-.97
049	13.425	-1.22
007	13.480 R	-1.59
390	13.365	-1.64
043	13.360	-1.69
009	13.360	-1.69
381	13.055 s	-3.88
--	Method 010.99	--
300	13.510	.70
Avg	13.425	
177	13.340	-1.01
072	12.200 S	-9.86
362	11.370 S	-16.35
--	Method 010.XX	--
416	14.696 s	5.92
114	14.335 s	4.03
372	14.105	2.79
090	13.985	2.16
292	13.980	2.13
322	13.918	1.80
072	13.895	1.69
262	13.700 R	1.24

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 010.XX --	
095	13.800	1.21
394	13.800	1.19
027	13.773	1.05
022	13.650 R	.88
415	13.657 R	.80
041	13.725	.78
389	13.710	.71
035	13.700	.70
137	13.705	.68
073	13.700	.67
405	13.690	.62
102	13.670	.49
131	13.655	.48
330	13.655	.48
232	13.645	.36
325	13.635	.32
275	13.630	.30
157	13.630	.28
028	13.620	.28
136	13.625	.27
029	13.615	.20
024	13.605	.17
361	13.605	.17
247	13.580	.06
Avg	13.577	
233	13.560	-.10
377	13.575	-.13
231	13.550	-.14
409	13.550	-.15
025	13.560	-.18
029	13.535	-.24
042	13.550	-.30
200	13.515	-.33
034	13.520	-.34
300	13.510	-.37
296	13.505	-.38
234	13.510	-.39
324	13.495	-.47

Lab	Average*	Index
--	Method 010.XX --	
070	13.505	-.48
211	13.485	-.50
086	13.480	-.51
040	13.480	-.52
023	13.475	-.57
037	13.540	-.61
106	13.465	-.64
055	13.460	-.64
288	13.445	-.71
049	13.425	-.83
414	13.390	-1.02
007	13.480 R	-1.13
390	13.365	-1.13
009	13.360	-1.17
043	13.360	-1.17
351	13.323	-1.35
177	13.340	-1.35
185	13.290	-1.52
254	13.215	-1.92
381	13.055	-2.76
072	12.870 s	-3.76
309	12.600 s	-5.19
072	12.200 s	-7.35
398	11.640 s	-10.25
362	11.370 s	-11.67
--	Method 020.10 --	
022	4.5500 s	4.34
095	4.4050	1.59
090	4.3150	.55
114	4.3150	.45
Avg	4.2709	
300	4.2500	-.20
405	4.2050	-.83
157	4.1352	-1.31
--	Method 020.20 --	
324	4.7500 s	5.65

Lab	Average*	Index
--	Method 020.20 --	
362	4.7400 s	5.52
381	4.4100 R	2.53
292	4.4450	1.83
231	4.4000	1.20
232	4.3900	1.08
391	4.3850	1.03
418	4.3250	.86
392	4.3400	.46
Avg	4.3053	
234	4.3050	-.06
390	4.2950	-.15
258	4.3000	-.26
200	4.2550	-.64
257	4.2575	-.65
177	4.2500	-.70
030	4.2500	-.95
309	4.2000	-1.34
397	4.1826	-1.56
--	Method 020.30 --	
416	4.2552	-.71
--	Method 020.40 --	
042	4.9000 s	6.33
193	4.3500	1.11
394	4.2650	.45
035	4.2250	.13
247	4.2150	.06
Avg	4.2100	
409	3.9950	-1.74
--	Method 020.50 --	
361	4.2600	.71
Avg	4.2600	
389	3.6500 S	-21.57
--	Method 020.99 --	
320	4.2750	-.71

Lab	Average*	Index
--	Method 020.XX --	
042	4.9000 s	9.80
324	4.7500 s	6.23
362	4.7400 s	6.09
022	4.5500 s	5.87
381	4.4100 R	2.83
292	4.4450	2.21
095	4.4050 R	2.06
231	4.4000	1.56
232	4.3900	1.43
391	4.3850	1.37
418	4.3250	1.03
193	4.3500	.89
392	4.3400	.77
090	4.3150	.63
114	4.3150	.47
258	4.3000	.35
234	4.3050	.30
390	4.2950	.17
Avg	4.2832	
394	4.2650	-.31
416	4.2552	-.37
200	4.2550	-.38
361	4.2600	-.41
257	4.2575	-.41
300	4.2500	-.44
177	4.2500	-.44
320	4.2750	-.48
035	4.2250	-.78
030	4.2500	-.80
247	4.2150	-.91
309	4.2000	-1.11
405	4.2050	-1.27
397	4.1826	-1.34
157	4.1352	-1.97
409	3.9950 A	-3.89
389	3.6500 s	-8.44

Lab	Average*	Index
--	Method 030.10 --	
405	0.0350	.88
Avg	0.0175	
090	0.0000	-.85
--	Method 030.20 --	
200	0.0400	.00
--	Method 030.40 --	
409	0.0300	1.12
Avg	0.0250	
247	0.0200	-.50
--	Method 030.99 --	
320	0.0600	.71
--	Method 030.XX --	
320	0.0600	1.53
200	0.0400	.45
405	0.0350	.32
Avg	0.0308	
409	0.0300	-.50
247	0.0200	-.54
090	0.0000	-1.53
--	Method 040.10 --	
090	4.3150	.83
Avg	4.2425	
405	4.1700	-.90
414	2.1900 S	-21.07
--	Method 040.20 --	
200	4.2150	.82
289	4.1950	.52
Avg	4.1717	
372	4.1050	-1.25
--	Method 040.40 --	
394	4.2650	.84

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 040.40	--
Avg	4.1150	
409	3.9650	-.89
--	Method 040.99	--
320	4.2150	1.18
Avg	4.2025	
247	4.1900	-.32
--	Method 040.XX	--
090	4.3150	1.34
394	4.2650	.83
320	4.2150	.55
200	4.2150	.33
289	4.1950	.20
247	4.1900	.08
Avg	4.1817	
405	4.1700	-.50
372	4.1050	-.75
409	3.9650	-2.18
414	2.1900 s	-19.42
--	Method 041.10	--
296	4.3550	1.64
041	4.2850	1.63
211	4.2950	.89
072	4.2850	.78
055	4.2800	.74
028	4.2800	.71
009	4.2400	.42
086	4.2400	.32
Avg	4.2248	
029	4.2150	-.14
102	4.2012	-.30
136	4.1950	-.49
131	4.1650	-.75
049	4.1700	-.79
254	4.1600	-.96
137	4.1150	-1.39
--	Method 041.10	--
040	4.1150	-1.75
185	4.2100 R	-2.27
--	Method 041.20	--
362	4.7100 S	5.77
055	4.2800	1.21
Avg	4.1667	
419	4.1450	-.28
415	4.0750	-.98
--	Method 041.30	--
260	4.1300	.71
--	Method 041.40	--
025	4.3500	1.51
Avg	4.2456	
027	4.2275	-.41
029	4.2150	-.49
131	4.1900	-.91
072	3.3700 S	-12.57
--	Method 041.50	--
007	4.3700 R	2.10
361	4.2400	1.11
023	4.2050	.87
325	4.1400	.40
360	4.1100	.28
Avg	4.0846	
070	3.9100	-1.25
393	3.9025	-1.31
--	Method 041.60	--
095	4.3550	1.51
296	4.3650	1.43
073	4.2800	.50
043	4.2700	.36
106	4.2500	.16
024	4.2450	.09
--	Method 041.60	--
Avg	4.2387	
351	4.2331	-.15
288	4.2200	-.20
397	4.2276	-.37
262	4.1050	-1.51
377	4.0750	-1.81
037	4.0900 R	-1.96
--	Method 041.99	--
028	4.3050	.87
Avg	4.0895	
322	3.8740	-.87
--	Method 041.XX	--
362	4.7100 s	4.34
007	4.3700	1.56
185	4.2100 R	1.53
095	4.3550	1.46
296	4.3650	1.43
296	4.3550	1.32
025	4.3500	1.28
041	4.2850 R	1.22
028	4.3050	.90
211	4.2950	.81
072	4.2850	.73
055	4.2800	.70
073	4.2800	.70
055	4.2800	.68
028	4.2800	.68
043	4.2700	.60
106	4.2500	.43
009	4.2400	.42
024	4.2450	.38
086	4.2400	.38
397	4.2276	.36
361	4.2400	.34
027	4.2275	.30
351	4.2331	.30
--	Method 041.XX	--
029	4.2150	.18
288	4.2200	.17
023	4.2050	.13
029	4.2150	.13
102	4.2012	.01
Avg	4.2001	
136	4.1950	-.22
131	4.1900	-.27
131	4.1650	-.30
049	4.1700	-.36
254	4.1600	-.48
419	4.1450	-.49
325	4.1400	-.52
260	4.1300	-.65
137	4.1150	-.74
360	4.1100	-.81
262	4.1050	-.86
040	4.1150	-1.02
415	4.0750	-1.07
377	4.0750	-1.09
037	4.0900 R	-1.27
070	3.9100	-2.47
393	3.9025	-2.54
322	3.8740	-2.77
072	3.3700 s	-7.06
--	Method 048.20	--
362	3.9200	1.29
Avg	3.6333	
193	3.5000	-.60
247	3.4800	-.69
--	Method 050.00	--
391	15.200 s	4.65
095	14.745	2.00
102	14.700	1.60
043	14.590	.97
028	14.590	.90
--	Method 050.00	--
009	14.585	.87
257	14.494	.49
049	14.445	.40
211	14.500	.35
055	14.480	.22
392	14.470	.17
Avg	14.444	
029	14.435	-.06
345	14.420	-.15
350	14.405	-.28
072	14.400	-.33
296	14.380	-.54
416	14.386	-.66
231	14.325	-.73
418	14.410	-.77
090	14.280	-1.02
258	14.240	-1.31
131	14.045	-2.45
--	Method 050.10	--
322	14.764	.77
Avg	14.557	
022	14.350	-.95
--	Method 050.30	--
405	15.325	1.90
381	14.905	.95
095	14.870	.89
193	14.780	.70
185	14.700	.66
040	14.500	.18
Avg	14.483	
262	14.450	-.13
137	14.310	-.39
136	14.060	-.95
351	14.027	-1.03
234	13.985	-1.12
397	13.885 X	-1.36

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 050.31 --	
086	14.395	.71
--	Method 050.50 --	
292	14.340	.97
023	14.295	.83
106	14.165	.42
Avg	14.039	
157	13.810	-.74
324	13.585	-1.46
--	Method 050.51 --	
389	14.880	1.73
377	14.500	.53
393	14.410	.17
Avg	14.383	
361	14.245	-.48
070	14.215	-.59
007	14.050	-1.27
--	Method 050.60 --	
390	15.155	1.36
055	14.725	.65
288	14.385	.10
Avg	14.319	
415	13.732	-.94
309	13.600	-1.16
--	Method 050.61 --	
030	14.850	1.47
024	14.630	.62
028	14.615	.59
025	14.580	.52
Avg	14.468	
035	14.440	-.22
029	14.330	-.53
037	14.255	-1.18
072	14.395 R	-1.57
041	14.045	-1.62
--	Method 050.99 --	
360	14.980 R	1.86
073	15.000	1.75
330	14.885	1.25
394	14.750	.80
027	14.610	.34
Avg	14.510	
289	14.460	-.19
232	14.400	-.37
177	14.391	-.42
325	14.370	-.47
260	14.120	-1.31
275	14.110	-1.35
042	13.600 R	-3.19
419	12.450 s	-6.87
--	Method 050.XX --	
405	15.325	2.54
391	15.200	2.17
390	15.155	2.10
360	14.980 R	1.77
073	15.000	1.69
381	14.905	1.34
330	14.885	1.28
389	14.880	1.26
095	14.870	1.26
030	14.850	1.19
193	14.780	1.01
095	14.745	.95
185	14.700	.94
322	14.764	.93
394	14.750	.89
055	14.725	.82
102	14.700	.76
024	14.630	.55
028	14.615	.52
027	14.610	.49
043	14.590	.47
025	14.580	.47
--	Method 050.XX --	
028	14.590	.44
009	14.585	.42
377	14.500	.34
040	14.500	.29
257	14.494	.24
049	14.445	.19
211	14.500	.18
262	14.450	.15
035	14.440	.14
055	14.480	.12
289	14.460	.11
392	14.470	.10
Avg	14.436	
029	14.435	-.01
345	14.420	-.05
350	14.405	-.11
232	14.400	-.12
072	14.400	-.13
393	14.410	-.14
288	14.385	-.15
177	14.391	-.17
325	14.370	-.20
296	14.380	-.23
292	14.340	-.28
416	14.386	-.29
029	14.330	-.30
231	14.325	-.32
418	14.410	-.35
137	14.310	-.36
023	14.295	-.41
090	14.280	-.45
022	14.350	-.49
361	14.245	-.55
258	14.240	-.58
086	14.395 R	-.62
070	14.215	-.63
106	14.165	-.78
037	14.255 R	-.82
--	Method 050.XX --	
260	14.120	-.91
275	14.110	-.94
136	14.060	-1.08
131	14.045	-1.11
041	14.045	-1.12
072	14.395 R	-1.16
351	14.027	-1.17
007	14.050	-1.18
234	13.985	-1.28
397	13.885 X	-1.60
157	13.810	-1.78
415	13.732	-2.01
309	13.600	-2.40
324	13.585	-2.42
042	13.600 R	-2.53
419	12.450 s	-5.66
--	Method 060.00 --	
416	0.4819	.93
193	0.4695	.85
362	0.3900 R	.47
Avg	0.3379	
007	0.2600	-.52
361	0.1400	-1.28
--	Method 060.10 --	
247	0.3400	.71
--	Method 060.99 --	
320	0.4450	.71
--	Method 060.XX --	
416	0.4819	.99
193	0.4695	.89
320	0.4450	.69
362	0.3900	.47
Avg	0.3609	
247	0.3400	-.30
--	Method 060.XX --	
007	0.2600	-.84
361	0.1400	-1.80
--	Method 101.00 --	
043	1.7400	.99
009	1.7222	.23
Avg	1.7191	
028	1.6950	-1.21
040	1.3800 S	-18.77
086	0.2347 S	-63.35
--	Method 101.30 --	
330	1.8850	1.39
041	1.8700	1.26
324	1.8350	.94
393	1.8000	.65
288	1.7450	.20
106	1.7350	.17
Avg	1.7210	
023	1.7120	-.08
131	1.6650	-.46
102	1.6094	-.92
035	1.5550	-1.36
292	1.5200	-1.64
--	Method 101.99 --	
320	1.7030	.71
--	Method 101.XX --	
330	1.8850	1.57
041	1.8700	1.43
324	1.8350	1.06
393	1.8000	.74
288	1.7450	.23
043	1.7400	.20
106	1.7350	.19
009	1.7222	.04
Avg	1.7206	

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 101.XX --	
023	1.7120	-.08
028	1.6950	-.27
131	1.6650	-.51
320	1.7030 R	-.93
102	1.6094	-1.03
035	1.5550	-1.53
292	1.5200	-1.85
040	1.3800 s	-4.07
086	0.2347 s	-13.70
--	Method 121.00 --	
309	1.3000 s	4.65
193	1.1150	2.25
392	1.0400	1.33
037	0.9780	.59
028	0.9600	.38
257	0.9530	.27
055	0.9400	.17
391	0.9340	.06
Avg	0.9308	
137	0.9250	-.09
043	0.9250	-.09
177	0.9295	-.19
390	0.9005	-.39
397	0.8979	-.40
040	0.8945	-.44
289	0.8950	-.47
029	0.8878	-.52
262	0.8800	-.63
200	0.8750	-.68
095	0.7100	-2.69
--	Method 121.30 --	
393	1.8715 s	20.05
041	1.1150 A	4.14
330	1.0000	1.68
231	0.9800	1.28

Lab	Average*	Index
--	Method 121.30 --	
409	0.9750	1.27
131	0.9600	1.05
157	0.9641	.93
419	0.9450	.54
023	0.9270	.15
Avg	0.9201	
389	0.9200	.00
106	0.9000	-.47
288	0.8900	-.63
324	0.8900	-.63
360	0.8970	-.64
102	0.8887	-.72
292	0.8800	-.84
009	0.8681	-1.10
035	0.8365	-1.80
--	Method 121.70 --	
415	1.8787 S	.00
--	Method 121.99 --	
234	0.9650	.71
Avg	0.9650	
320	0.7449 S	-7.06
--	Method 121.XX --	
415	1.8787 s	14.48
393	1.8715 s	14.36
309	1.3000 s	5.78
041	1.1150	2.75
193	1.1150	2.74
381	1.0450	1.65
392	1.0400	1.58
330	1.0000	.96
409	0.9750	.69
231	0.9800	.67
037	0.9780	.64
131	0.9600 R	.58
234	0.9650	.57

Lab	Average*	Index
--	Method 121.XX --	
157	0.9641	.41
028	0.9600	.38
257	0.9530	.24
055	0.9400	.16
419	0.9450	.14
Avg	0.9376	
391	0.9340	-.08
023	0.9270	-.16
137	0.9250	-.21
043	0.9250	-.21
177	0.9295	-.27
389	0.9200	-.27
390	0.9005	-.59
106	0.9000	-.60
397	0.8979	-.62
040	0.8945	-.66
289	0.8950	-.69
360	0.8970	-.70
324	0.8900	-.73
288	0.8900	-.73
029	0.8878	-.77
102	0.8887	-.78
292	0.8800	-.89
262	0.8800	-.90
200	0.8750	-.97
009	0.8681	-1.07
035	0.8365	-1.58
320	0.7449 s	-3.47
095	0.7100 A	-3.50
--	Method 131.00 --	
193	0.8680	.83
289	0.8600	.43
Avg	0.8510	
200	0.8250	-1.28
--	Method 131.30 --	
157	0.8014	.86

Lab	Average*	Index
--	Method 131.30 --	
Avg	0.7932	
360	0.7850	-.87
--	Method 131.99 --	
040	0.8550	.71
--	Method 131.XX --	
193	0.8680	1.09
289	0.8600	.84
040	0.8550	.71
Avg	0.8324	
200	0.8250	-.27
157	0.8014	-.96
360	0.7850	-1.45
--	Method 144.01 --	
055	14.805	2.26
043	14.565	1.30
324	14.425	.57
288	14.335	.16
Avg	14.309	
102	14.223	-.39
193	14.225	-.43
157	14.211	-.44
095	14.210	-.51
200	14.215	-.68
397	14.133	-.81
416	14.052	-1.20
137	13.520 s	-3.60
--	Method 144.02 --	
086	13.945	.87
Avg	13.760	
361	13.575	-.87
--	Method 144.50 --	
289	13.825	.71

Lab	Average*	Index
--	Method 144.99 --	
360	15.280	2.07
330	15.215 R	2.03
389	14.400	.55
177	14.287	.36
028	14.155	.13
Avg	14.078	
040	14.070	-.01
029	14.060	-.05
023	13.963	-.20
106	13.870	-.36
009	13.842	-.42
247	13.445 R	-1.34
131	12.855	-2.10
409	11.220 s	-4.91
035	4.4100 s	-16.61
--	Method 144.XX --	
360	15.280	2.58
330	15.215 R	2.53
055	14.805	1.52
043	14.565	1.03
324	14.425	.68
389	14.400	.62
288	14.335	.48
177	14.287	.37
200	14.215	.33
193	14.225	.25
095	14.210	.23
102	14.223	.22
157	14.211	.20
028	14.155	.07
397	14.133	.03
Avg	14.122	
040	14.070	-.12
029	14.060	-.14
416	14.052	-.20
023	13.963	-.35
086	13.945	-.40

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 144.XX	--
106	13.870	-.56
009	13.842	-.64
289	13.825	-.77
361	13.575	-1.22
137	13.520	-1.34
247	13.445 R	-1.82
131	12.855	-2.82
409	11.220 s	-6.46
035	4.4100 s	-21.62
--	Method 151.00	--
136	1.7000	.71
--	Method 151.30	--
419	0.4150	-.71
--	Method 151.99	--
409	2.0000	.71
040	1.9550	.54
Avg	1.8183	
200	1.5000	-1.31
--	Method 151.XX	--
409	2.0000	.79
040	1.9550	.72
136	1.7000	.31
Avg	1.5140	
200	1.5000	-.16
419	0.4150	-1.80
--	Method 165.00	--
137	0.1800	1.79
037	0.1720	1.24
289	0.1620	.34
Avg	0.1580	
055	0.1550	-.47
040	0.1510	-.62
391	0.1500	-.65
--	Method 165.00	--
392	0.1470	-.90
257	0.1470	-.91
--	Method 165.70	--
043	0.1650	.92
Avg	0.1556	
397	0.1462	-.81
--	Method 165.99	--
324	0.1700	1.10
360	0.1685	.99
231	0.1650	.82
106	0.1600	.39
Avg	0.1546	
009	0.1527	-.61
232	0.1453	-.67
409	0.1450	-.77
288	0.1300	-1.75
--	Method 165.XX	--
137	0.1800	1.82
037	0.1720	1.29
324	0.1700	1.05
360	0.1685	.93
043	0.1650	.77
231	0.1650	.77
289	0.1620	.44
106	0.1600	.28
Avg	0.1564	
055	0.1550	-.40
040	0.1510	-.48
391	0.1500	-.49
009	0.1527 R	-.71
392	0.1470	-.73
257	0.1470	-.74
397	0.1462	-.79
232	0.1453	-.87
409	0.1450	-.96
--	Method 165.XX	--
288	0.1300	-2.03
--	Method 171.10	--
200	0.1500	.00
--	Method 171.99	--
381	0.1300	.71
--	Method 171.XX	--
200	0.1500	.86
Avg	0.1400	
381	0.1300	-.87
--	Method 181.00	--
193	1.3000	1.22
Avg	1.0033	
200	1.0000	-.01
136	0.7100	-1.00
--	Method 181.30	--
009	1.1500 R	1.34
157	1.1000	.95
419	1.1000	.95
232	1.0100	.33
Avg	0.9619	
106	0.8000	-1.12
102	0.7998	-1.15
--	Method 181.99	--
409	1.0000	.00
--	Method 181.XX	--
193	1.3000 R	2.56
009	1.1500	1.26
157	1.1000	.89
419	1.1000	.89
232	1.0100	.31
409	1.0000	.24
--	Method 181.XX	--
200	1.0000	.24
Avg	0.9633	
106	0.8000	-1.07
102	0.7998	-1.10
136	0.7100	-1.66
--	Method 190.00	--
043	10.850 S	3.73
397	10.125	.71
136	10.120	.67
102	10.033	.32
040	10.000	.19
Avg	9.9575	
023	9.5100	-1.85
--	Method 190.99	--
055	10.230	.99
029	10.190	.74
200	10.040	.31
Avg	10.019	
009	10.011	-.03
095	9.6250	-1.70
--	Method 190.XX	--
043	10.850 s	3.75
055	10.230	1.11
029	10.190	.87
397	10.125	.61
136	10.120	.57
200	10.040	.37
102	10.033	.21
040	10.000	.10
009	10.011	.10
Avg	9.9884	
095	9.6250	-1.56
023	9.5100	-2.05
--	Method 191.00	--
009	45.600	1.08
200	41.500	.35
Avg	41.200	
193	36.500	-1.09
--	Method 191.30	--
102	32.408	.88
Avg	29.179	
035	25.950	-.85
--	Method 191.XX	--
009	45.600	1.27
200	41.500	.73
193	36.500	.07
Avg	36.392	
102	32.408	-.56
035	25.950	-1.42
--	Method 202.00	--
193	17.900	1.13
009	15.700	.62
Avg	13.224	
397	9.7962	-.82
200	9.5000	-1.08
--	Method 202.30	--
106	15.000	1.68
419	11.000	.48
324	9.5500	.25
Avg	9.2482	
040	8.9500	-.43
102	6.0890	-.87
232	4.9000	-1.20
--	Method 202.99	--
409	14.000	.88
Avg	10.250	
320	6.5000	-.85

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
			--	Method 221.99 --		--	Method 241.00 --		--	Method 241.XX --		--	Method 251.30 --	
193	17.900	1.71	409	0.0069	.87	397	0.3333	.17	041	0.4007	1.14	Avg	5.9989	
009	15.700	1.20	Avg	0.0058		Avg	0.3165		360	0.3950	1.09	106	4.6500	-.56
106	15.000	1.13	200	0.0048	-.87	390	0.2860	-.32	131	0.3890	1.03	102	4.2445	-.74
409	14.000	.82				200	0.2300	-.90	040	0.3645 R	1.01	157	4.2000	-.75
419	11.000	.06	--	Method 221.XX --		043	0.2195	-1.01	095	0.3800	.96			
Avg	10.740		292	0.0100 s	5.68	193	0.2100	-1.11	055	0.3655	.79	--	Method 251.99 --	
397	9.7962	-.23	041	0.0070	2.34	262	0.1900	-1.31	157	0.3626	.76	409	8.0000	.92
324	9.5500	-.35	409	0.0069	2.13	381	0.1440	-1.79	028	0.3550	.68	Avg	6.0875	
040	8.9500	-.57	029	0.0062	1.34				330	0.3400	.61	040	4.1750	-.81
200	9.5000	-.67	330	0.0055	.69	--	Method 241.30 --		177	0.3370	.50			
320	6.5000	-1.02	009	0.0051	.21	041	0.4007	1.46	106	0.3350	.48	--	Method 251.XX --	
102	6.0890	-1.11	040	0.0051	.21	360	0.3950	1.40	397	0.3333	.47	324	9.9500	1.86
232	4.9000	-1.40	Avg	0.0050		131	0.3890	1.34	234	0.2950 R	.36	409	8.0000	1.09
			028	0.0049	-.07	157	0.3626	1.06	324	0.2950	.10	419	6.9500	.70
--	Method 221.00 --		102	0.0049	-.13	330	0.3400 R	.88	Avg	0.2870		Avg	5.7449	
029	0.0062	1.76	043	0.0049	-.24	106	0.3350	.77	390	0.2860	-.06	106	4.6500	-.48
Avg	0.0050		200	0.0048	-.25	324	0.2950	.36	419	0.2300	-.57	102	4.2445	-.67
028	0.0049	-.19	288	0.0048	-.25	Avg	0.2607		231	0.2300	-.58	157	4.2000	-.68
043	0.0049	-.36	106	0.0050	-.28	419	0.2300	-.32	200	0.2300	-.58	040	4.1750	-.69
193	0.0047	-.68	389	0.0047	-.36	231	0.2300	-.34	043	0.2195	-.68	136	3.7900	-.86
095	0.0045	-.89	193	0.0047	-.45	389	0.1800	-.84	193	0.2100	-.78			
			035	0.0045	-.54	023	0.1790	-.85	262	0.1900	-.97	--	Method 261.00 --	
--	Method 221.30 --		095	0.0045	-.58	102	0.1736	-.91	389	0.1800	-1.07	289	0.2550	1.54
292	0.0100 s	8.92	419	0.0044	-.68	409	0.1650	-1.00	023	0.1790	-1.08	037	0.2500	1.16
041	0.0070 s	4.00	232	0.0043	-.75	035	0.1645	-1.00	102	0.1736	-1.14	257	0.2440	.88
330	0.0055	1.53	157	0.0042	-.92	292	0.1500	-1.15	409	0.1650	-1.23	262	0.2400	.85
040	0.0051	.85	324	0.0032	-2.00	288	0.1400 R	-1.36	035	0.1645	-1.23	200	0.2400	.85
009	0.0051	.85							320	0.1580	-1.30	029	0.2468 X	.83
106	0.0050	.68	--	Method 241.00 --		--	Method 241.99 --		292	0.1500	-1.37	137	0.2400	.28
102	0.0049	.43	289	0.4750	1.65	234	0.2950	.91	381	0.1440	-1.44	392	0.2395	.25
288	0.0048	.22	137	0.4100	.98	Avg	0.2265		288	0.1400 R	-1.56	397	0.2369	.24
389	0.0047	.09	037	0.4090	.96	320	0.1580	-.82				086	0.2379	.12
Avg	0.0046		009	0.4039	.91				--	Method 251.00 --		177	0.2375	.09
035	0.0045	-.27	040	0.3645 R	.83	--	Method 241.XX --		136	3.7900	-.71	Avg	0.2365	
419	0.0044	-.50	095	0.3800	.69	289	0.4750	1.89				028	0.2315	-.40
232	0.0043	-.56	055	0.3655	.51	137	0.4100	1.24	--	Method 251.30 --		390	0.2310	-.60
157	0.0042	-.80	028	0.3550	.40	037	0.4090	1.23	324	9.9500	1.65	055	0.2285	-.64
324	0.0032	-2.40	177	0.3370	.21	009	0.4039	1.17	419	6.9500	.59	381	0.2350	-.66

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 261.00	--
043	0.2200	-1.55
193	0.2065	-2.42
391	0.1365 s	-8.15
--	Method 261.11	--
095	0.2350	.53
Avg	0.2285	
040	0.2220	-1.11
--	Method 261.30	--
389	0.4950 s	14.02
330	0.3050 S	3.91
041	0.2709	1.82
102	0.2627	1.38
324	0.2550	.98
023	0.2535	.87
106	0.2400	.12
231	0.2400	.12
288	0.2400	.12
Avg	0.2377	
419	0.2350	-.31
157	0.2310	-.37
360	0.2280	-.60
232	0.2265	-.72
292	0.2200	-.97
035	0.2220	-.99
009	0.2036	-1.87
--	Method 261.99	--
234	0.2400	.00
320	0.1889 S	.00
Avg	0.2400	
--	Method 261.XX	--
389	0.4950 s	17.41
330	0.3050 s	4.88
041	0.2709	2.30
102	0.2627	1.75
289	0.2550	1.26
324	0.2550	1.26
023	0.2535	1.12
037	0.2500	.94
257	0.2440	.71
200	0.2400	.70
262	0.2400	.70
029	0.2468 X	.66
288	0.2400	.20
231	0.2400	.20
234	0.2400	.20
137	0.2400	.20
106	0.2400	.20
392	0.2395	.17
086	0.2379	.06
177	0.2375	.04
Avg	0.2371	
397	0.2369	-.20
419	0.2350	-.37
095	0.2350	-.37
028	0.2315	-.38
157	0.2310	-.41
390	0.2310	-.53
381	0.2350	-.56
055	0.2285	-.58
360	0.2280	-.70
232	0.2265	-.86
292	0.2200	-1.15
035	0.2220	-1.18
043	0.2200	-1.33
040	0.2220 R	-1.48
193	0.2065	-2.06
009	0.2036	-2.27
320	0.1889 s	-3.52
391	0.1365 s	-6.86
--	Method 271.00	--
029	0.0574	.88
--	Method 271.00	--
Avg	0.0567	
193	0.0560	-.85
--	Method 281.30	--
040	27.250	.71
--	Method 289.30	--
009	2.9500	1.15
106	2.7500	.70
232	2.4400	.70
157	2.4350	.13
Avg	2.3650	
324	2.2000	-.47
288	1.4150	-1.72
--	Method 289.99	--
200	4.6000 S	2.97
409	2.5000	.71
Avg	2.5000	
--	Method 289.XX	--
200	4.6000 s	4.05
009	2.9500	1.13
409	2.5000	.94
232	2.4400	.70
106	2.7500	.67
157	2.4350	.10
Avg	2.3843	
324	2.2000	-.50
288	1.4150	-1.77
--	Method 291.00	--
397	29.241	1.30
Avg	24.548	
200	24.500	-.42
009	23.450	-.77
193	21.000	-1.02
--	Method 291.30	--
102	26.688	1.34
157	25.650	.75
Avg	23.678	
324	22.750	-.43
419	23.000	-.46
232	20.300	-1.32
--	Method 291.99	--
409	33.000	.87
Avg	25.450	
035	17.900	-.86
--	Method 291.XX	--
409	33.000	2.01
397	29.241	1.14
102	26.688	.70
200	24.500	.35
157	25.650	.31
Avg	24.316	
419	23.000	-.38
324	22.750	-.39
009	23.450	-.62
193	21.000	-.80
232	20.300	-.95
035	17.900	-1.49
--	Method 301.30	--
419	10.500	.71
--	Method 301.99	--
200	0.2500	.86
Avg	0.1775	
040	0.1050	-.87
--	Method 301.XX	--
419	10.500	1.29
Avg	3.6183	
200	0.2500	-.63
040	0.1050	-.66
--	Method 311.00	--
193	0.4950	.71
--	Method 311.99	--
035	0.4375	.86
Avg	0.4205	
009	0.4035	-.87
--	Method 311.XX	--
193	0.4950	1.20
Avg	0.4453	
035	0.4375	-.20
009	0.4035	-1.01
--	Method 321.00	--
289	3.3450 s	126.82
397	0.3401 s	2.91
391	0.3115 R	2.78
095	0.3400	1.93
028	0.3240	1.08
257	0.3160	.97
137	0.3150	.94
055	0.3100	.49
177	0.3035	.49
234	0.3000	.08
Avg	0.2981	
262	0.2900	-.54
200	0.2950	-.64
390	0.2875	-.65
043	0.2825	-.66
392	0.2810	-.72
381	0.2700	-1.23
193	0.2590	-1.65
--	Method 321.30	--
330	0.3650	1.74

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 321.30 --	
324	0.3400 R	1.22
292	0.3550	1.17
360	0.3550	1.17
040	0.3505	1.15
419	0.3350	.98
102	0.3405	.70
389	0.3360	.51
131	0.3240	.19
Avg	0.3217	
009	0.3206	-.05
023	0.3125	-.33
106	0.3200	-.35
393	0.3068	-.53
231	0.3050	-.60
035	0.2965	-.91
157	0.2865	-1.22
041	0.2847	-1.29
232	0.2749	-1.67
--	Method 321.99 --	
200	0.3210	.73
Avg	0.2925	
320	0.2640	-.98
--	Method 321.XX --	
289	3.3450 s	100.81
391	0.3115 R	2.17
397	0.3401 R	2.10
330	0.3650	1.98
292	0.3550	1.48
360	0.3550	1.48
040	0.3505	1.43
324	0.3400	1.39
095	0.3400	1.17
419	0.3350	1.15
102	0.3405	1.01
389	0.3360	.84
257	0.3160	.53
--	Method 321.XX --	
137	0.3150	.52
131	0.3240	.47
106	0.3200	.45
028	0.3240	.44
200	0.3210	.34
009	0.3206	.33
023	0.3125	.10
Avg	0.3108	
055	0.3100	-.03
393	0.3068	-.17
231	0.3050	-.25
234	0.3000	-.36
177	0.3035	-.42
035	0.2965	-.54
200	0.2950	-.72
262	0.2900	-.77
157	0.2865	-.81
390	0.2875	-.86
041	0.2847	-.87
043	0.2825	-.94
392	0.2810	-.99
232	0.2749	-1.24
381	0.2700	-1.39
193	0.2590	-1.73
320	0.2640	-1.77
--	Method 325.00 --	
193	0.0880	.00

* X=Excluded from lab performance S/s=Screened Outlier R=Duplicate Range too large A=Analysis beyond 3-s limits

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
001.10	9	0.0000	1.03	0.09	050.51	6	0.0000	1.01	0.27
001.99	8	0.2494	4.48	0.33	050.60	5	0.0000	1.05	0.14
001.XX	17	-0.1534	1.17	0.10	050.61	9	-0.0310	0.91	0.61
002.99	9	-0.1141	1.02	0.29	050.99	13	-0.6409	2.28	0.44
002.XX	10	-0.0855	1.01	0.27	050.XX	70	-0.1282	1.22	0.28
009.10	7	-1.7883	4.81	0.45	060.00	5	0.0674	0.95	0.16
009.XX	8	-1.6186	4.65	0.48	060.XX	7	0.0000	1.02	0.19
010.10	2	0.0000	0.00	0.00	101.00	5	-15.5635	27.45	5.36
010.11	9	-0.5343	1.87	0.20	101.30	11	0.0000	1.01	0.17
010.12	8	-0.1895	3.92	0.26	101.XX	17	-1.0002	3.48	0.68
010.60	47	0.0059	1.23	0.41	121.00	20	0.2245	1.40	0.29
010.99	4	-6.5257	8.02	0.85	121.30	18	1.3424	4.86	0.29
010.XX	67	-0.3133	2.39	0.54	121.99	2	-3.1127	4.40	2.40
020.10	7	0.3864	1.32	1.35	121.XX	41	0.6898	3.47	0.42
020.20	18	0.6939	2.01	0.58	131.00	3	0.0000	1.10	0.15
020.40	6	0.9130	2.42	1.31	131.30	2	0.0000	1.05	0.44
020.50	2	-10.7834	15.25	0.50	131.XX	6	0.0000	1.04	0.13
020.XX	35	0.4322	2.79	1.31	144.01	12	-0.2998	1.40	0.26
030.10	2	0.0000	1.20	0.17	144.02	2	0.0000	1.21	0.12
030.40	2	0.0000	0.71	0.71	144.99	14	-1.4752	4.67	0.26
030.XX	6	0.0000	0.99	0.30	144.XX	29	-0.9365	4.29	0.26
040.10	3	-7.0225	12.19	0.37	151.99	3	0.0000	1.08	0.23
040.20	3	0.0000	1.10	0.18	151.XX	5	0.0000	1.06	0.09
040.40	2	0.0000	1.18	0.22	165.00	8	0.0000	1.00	0.25
040.99	2	0.0000	0.45	0.81	165.70	2	0.0000	1.15	0.31
040.XX	10	-1.9418	6.21	0.30	165.99	8	0.0000	0.99	0.28
041.10	17	-0.0109	0.85	0.74	165.XX	18	-0.0159	0.96	0.27
041.20	4	1.4415	3.02	0.13	171.XX	2	0.0000	1.22	0.06
041.40	5	-2.5138	5.69	0.27	181.00	3	0.0000	1.01	0.40
041.50	7	0.2915	1.22	0.22	181.30	6	0.2166	1.08	0.17
041.60	12	-0.1353	1.03	0.45	181.XX	10	0.2203	1.19	0.43
041.99	2	0.0000	1.22	0.05	190.00	6	0.6135	1.78	0.27
041.XX	42	-0.0582	1.28	0.71	190.99	5	0.0000	1.03	0.23
048.20	3	0.0000	1.12	0.03	190.XX	11	0.3357	1.47	0.25
048.XX	3	0.0000	1.12	0.03	191.00	3	0.0000	1.06	0.30
050.00	22	0.2112	1.36	0.33	191.30	2	0.0000	1.19	0.19
050.10	2	0.0000	1.09	0.40	191.XX	5	0.0000	1.05	0.15
050.30	12	0.0000	1.00	0.19	202.00	4	0.0000	1.02	0.31
050.50	5	0.0000	1.06	0.08	202.30	6	0.0000	0.99	0.30

MAGRUDER - Fertilizer Check Sample No. - 200211 Grade 14-4-14

Method Evaluation - Z Values Based on 1 Reports

Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs	Method Code	Number Of Labs	Avg Bias of Labs	Std Dev of Biases	Std Dev Within Labs
202.99	2	0.0000	1.20	0.18					
202.XX	12	0.0000	0.98	0.27					
221.00	5	0.0000	1.02	0.26					
221.30	14	0.9227	2.69	0.24					
221.99	2	0.0000	1.22	0.04					
221.XX	21	0.2707	1.58	0.16					
241.00	16	0.0311	0.99	0.19					
241.30	16	-0.0269	1.02	0.16					
241.99	2	0.0000	1.15	0.30					
241.XX	34	-0.0181	1.00	0.17					
251.30	5	0.0000	1.03	0.21					
251.99	2	0.0000	1.15	0.30					
251.XX	8	0.0000	1.00	0.24					
261.00	18	-0.4473	2.09	0.52					
261.11	2	0.0000	0.59	0.76					
261.30	16	1.1054	3.68	0.41					
261.99	2	0.0000	0.00	0.00					
261.XX	38	0.2876	3.32	0.53					
271.00	2	0.0000	1.20	0.17					
271.XX	2	0.0000	1.20	0.17					
289.30	6	0.0000	0.97	0.37					
289.99	2	1.4849	2.10	0.50					
289.XX	8	0.5060	1.65	0.46					
291.00	4	0.0000	0.96	0.44					
291.30	5	0.0000	0.96	0.41					
291.99	2	0.0000	1.22	0.10					
291.XX	11	0.0000	0.98	0.29					
301.99	2	0.0000	1.22	0.04					
301.XX	3	0.0000	1.12	0.05					
311.99	2	0.0000	1.21	0.14					
311.XX	3	0.0000	1.11	0.07					
321.00	17	7.5859	30.70	1.83					
321.30	18	0.0354	0.92	0.44					
321.99	2	0.0000	1.04	0.46					
321.XX	36	2.8268	16.80	1.06					