MAGRUDER - Fertilizer Check Sample No. - 200202 Grade 12-6-0-14S

Method	AOAC Ref.	Method Code	- Pass 1 Results for 69 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 67 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Ammoniacal Nitrogen, MgO Distillation .	920.03	001.10	1	15.400	0.0000	0.0000	1	15.400	0.0000	0.0000
Ammoniacal Nitrogen, Other		001.99	1	15.040	0.0141	0.0200	1	15.040	0.0141	0.0200
Method Group 001.XX PCT			2	15.220	0.2080	0.0100	2	15.220	0.2080	0.0100
Total Nitrogen, Modified Comprehensive	978.02	010.11	11	15.949	0.2076	0.0624	10	15.948	0.2150	0.0456
Total Nitrogen, Salicylic	955.04D	010.12	6	16.134	0.2423	0.1209	6	16.134	0.2423	0.1209
Total Nitrogen, Combustion		010.60	36	16.196	0.1260	0.0568	34	16.193	0.1226	0.0440
Total Nitrogen, Other		010.99	9	16.003	0.3245	0.1177	8	15.969	0.3144	0.0674
Method Group 010.XX PCT			64	16.131	0.2281	0.0799	60	16.125	0.2214	0.0576
Total Phosphate, Grav Quimociac	962.02	020.10	4	1.0463	0.0793	0.0775	4	1.0463	0.0793	0.0775
Total Phosphate, Spectrometric	958.01	020.20	11	1.3645	0.3347	0.0382	10	1.3865	0.3432	0.0290
Total Phosphate, Alka. Quimociac	969.02	020.30	1	1.0272	0.0273	0.0386	1	1.0272	0.0273	0.0386
Total Phosphate, Automated	978.01	020.40	4	1.3550	0.2021	0.0350	4	1.3550	0.2021	0.0350
Total Phosphate, ICP		020.50	5	1.0519	0.0764	0.0086	5	1.0519	0.0764	0.0086
Total Phosphate, Other		020.99	1	1.0800	0.0000	0.0000	1	1.0800	0.0000	0.0000
Method Group 020.XX PCT			26	1.2301	0.2791	0.0366	23	1.1983	0.2199	0.0283
Insoluble Phosphate, Grav Quimociac ...	963.03C	030.10	1	0.0000	0.0000	0.0000	1	0.0000	0.0000	0.0000
Insoluble Phosphate, Spectrometric	963.03C	030.20	1	0.1450	0.0071	0.0100	1	0.1450	0.0071	0.0100
Method Group 030.XX PCT			2	0.0725	0.0838	0.0050	2	0.0725	0.0838	0.0050
InDir Available Phosphate, Grav Quim ..	960.02	040.10	2	1.0825	0.0850	0.0850	2	1.0825	0.0850	0.0850
InDir Available Phosphate, Spectrometri	960.02	040.20	2	1.6700	0.8776	0.0000	2	1.6700	0.8776	0.0000
InDir Available Phosphate, Automated ..	960.02	040.40	1	0.9650	0.0071	0.0100	1	0.9650	0.0071	0.0100
InDir Available Phosphate, Other		040.99	1	0.9775	0.0007	0.0010	1	0.9775	0.0007	0.0010
Method Group 040.XX PCT			6	1.2413	0.5608	0.0302	5	1.2645	0.6158	0.0022
Dir Available Phosphate, Grav Quim	960.03E	041.10	12	0.9418	0.1101	0.0653	11	0.9493	0.1022	0.0439
Dir Available Phosphate, Spectrometric	960.03D	041.20	3	0.9769	0.0345	0.0113	3	0.9769	0.0345	0.0113
Dir Available Phosphate, Alka. Quim ...	960.03C	041.30	1	0.9750	0.0495	0.0700	1	0.9750	0.0495	0.0700
Dir Available Phosphate, Automated	978.01	041.40	3	1.2533	0.2342	0.0200	3	1.2533	0.2342	0.0200
Dir Available Phosphate, ICP		041.50	5	1.1340	0.2206	0.0440	4	1.1288	0.2446	0.0075
Dir Available Phosphate, EDTA Extract .	993.01	041.60	11	1.0718	0.1756	0.0396	11	1.0718	0.1756	0.0396
Dir Available Phosphate, Other		041.99	2	0.9975	0.0377	0.0550	2	0.9975	0.0377	0.0550
Method Group 041.XX PCT			37	1.0384	0.1777	0.0463	34	1.0384	0.1781	0.0301
Soluble Potash, ICP (Citrate)		050.51	1	0.2500	0.0707	0.1000	1	0.2500	0.0707	0.1000
Soluble Potash, Flame (Oxalate)	983.02(a	050.60	1	0.0650	0.0071	0.0100	1	0.0650	0.0071	0.0100
Soluble Potash, Other		050.99	1	18.700	0.0283	0.0400	1	18.700	0.0283	0.0400
Method Group 050.XX PCT			3	6.3383	9.5757	0.0500	3	6.3383	9.5757	0.0500
Free Water, Vacuum Oven	965.08B	060.00	5	0.9543	0.2799	0.0511	5	0.9543	0.2799	0.0511
Acid Soluble Calcium, ICP		101.30	6	0.7053	0.0241	0.0064	6	0.7053	0.0241	0.0064
Acid Soluble Magnesium, AA	984.01	121.00	1	0.1850	0.0071	0.0100	1	0.1850	0.0071	0.0100
Acid Soluble Magnesium, ICP		121.30	6	0.1743	0.0075	0.0033	6	0.1743	0.0075	0.0033

Method	AOAC Ref.	Method Code	- Pass 1 Results for 69 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 67 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Method Group 121.XX PCT			7	0.1758	0.0081	0.0042	7	0.1758	0.0081	0.0042
Water Soluble Magnesium, Other		131.99	2	0.9735	0.1255	0.0370	2	0.9735	0.1255	0.0370
Sulfur, Gravimetric	980.02a	144.01	12	17.930	0.4218	0.1234	12	17.930	0.4218	0.1234
Sulfur, Gravimetric	980.02b	144.02	1	19.595	0.0071	0.0100	1	19.595	0.0071	0.0100
Sulfur, Other		144.99	19	17.969	0.8528	0.1318	18	18.068	0.7597	0.1147
Method Group 144.XX PCT			33	18.031	0.7670	0.1559	32	18.005	0.7584	0.1248
Arsenic, ICP		151.30	2	0.8541	0.3446	0.0742	2	0.8541	0.3446	0.0742
Arsenic, Other		151.99	3	1.2583	0.3579	0.0700	3	1.2583	0.3579	0.0700
Method Group 151.XX PPM			5	1.0967	0.3928	0.0717	5	1.0967	0.3928	0.0717
Acid Soluble Boron, Other		165.99	1	0.0047	0.0002	0.0003	1	0.0047	0.0002	0.0003
Cadmium, Atomic Absorption		181.00	1	1.0500	0.0707	0.1000	1	1.0500	0.0707	0.1000
Cadmium, ICP		181.30	8	0.8896	0.2700	0.0573	7	0.8738	0.2836	0.0369
Method Group 181.XX PPM			9	0.9074	0.2594	0.0620	9	0.9074	0.2594	0.0620
Chromium, Atomic Absorption		191.00	1	29.500	0.7071	1.0000	1	29.500	0.7071	1.0000
Chromium, ICP		191.30	2	29.329	0.6328	0.8315	2	29.329	0.6328	0.8315
Method Group 191.XX PPM			3	29.386	0.5900	0.8877	3	29.386	0.5900	0.8877
Acid Soluble Cobalt, ICP	965.11	202.30	7	2.9190	1.4240	0.2284	7	2.9190	1.4240	0.2284
Acid Soluble Cobalt, Other		202.99	1	4.7200	0.4384	0.6200	1	4.7200	0.4384	0.6200
Method Group 202.XX PPM			8	3.1441	1.4658	0.2773	8	3.1441	1.4658	0.2773
Acid Soluble Copper, Atomic Absorption	975.01	221.00	7	0.0196	0.0016	0.0005	6	0.0190	0.0007	0.0003
Acid Soluble Copper, ICP		221.30	11	0.0198	0.0017	0.0002	10	0.0196	0.0016	0.0002
Acid Soluble Copper, Other		221.99	3	0.0201	0.0012	0.0003	3	0.0201	0.0012	0.0003
Method Group 221.XX PCT			21	0.0198	0.0016	0.0003	19	0.0197	0.0015	0.0002
Acid Soluble Iron, Atomic Absorption ..	980.01	241.00	1	0.5967	0.0197	0.0279	1	0.5967	0.0197	0.0279
Acid Soluble Iron, ICP		241.30	5	0.6883	0.0152	0.0089	5	0.6883	0.0152	0.0089
Acid Soluble Iron, Other		241.99	1	0.6797	0.0014	0.0020	1	0.6797	0.0014	0.0020
Method Group 241.XX PCT			7	0.6740	0.0357	0.0106	7	0.6740	0.0357	0.0106
Lead, Atomic Absorption		251.00	2	45.586	6.8290	1.3175	2	45.586	6.8290	1.3175
Lead, ICP		251.30	8	35.059	16.737	1.5346	8	35.059	16.737	1.5346
Lead, Other		251.99	3	30.573	18.768	2.3667	3	30.573	18.768	2.3667
Method Group 251.XX PPM			13	35.643	16.320	1.6932	12	35.322	16.942	1.2510
Acid Soluble Manganese, AA	972.02a	261.00	1	0.0132	0.0010	0.0014	1	0.0132	0.0010	0.0014
Acid Soluble Manganese, ICP	972.02a	261.30	4	0.0129	0.0012	0.0004	4	0.0129	0.0012	0.0004
Acid Soluble Manganese, Other		261.99	1	0.0135	0.0000	0.0000	1	0.0135	0.0000	0.0000
Method Group 261.XX PCT			6	0.0130	0.0010	0.0005	6	0.0130	0.0010	0.0005
Mercury, Atomic Absorption		281.00	3	0.5367	0.3756	0.0533	3	0.5367	0.3756	0.0533
Mercury, ICP		281.30	1	0.8800	0.0141	0.0200	1	0.8800	0.0141	0.0200
Mercury, Other		281.99	4	0.5633	0.3160	0.0265	4	0.5633	0.3160	0.0265
Method Group 281.XX PPM			8	0.5929	0.3261	0.0358	8	0.5929	0.3261	0.0358

Method	AOAC Ref.	Method Code	- Pass 1 Results for 69 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 67 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Molybdenum, ICP		289.30	5	2.2558	0.7741	0.0659	5	2.2558	0.7741	0.0659
Molybdenum, Other		289.99	3	3.2600	0.7414	0.3467	3	3.2600	0.7414	0.3467
Method Group 289.XX PPM			8	2.6323	0.8915	0.1712	7	2.5727	0.9315	0.0956
Nickel, Atomic Absorption		291.00	2	14.811	0.2414	0.1250	2	14.811	0.2414	0.1250
Nickel, ICP		291.30	6	15.436	2.4242	0.6162	6	15.436	2.4242	0.6162
Method Group 291.XX PPM			8	15.279	2.0974	0.4934	8	15.279	2.0974	0.4934
Selenium, Other		301.99	4	1.6713	1.2028	0.0975	4	1.6713	1.2028	0.0975
Sodium, Flame Photometric	974.01	311.30	1	0.1031	0.0028	0.0039	1	0.1031	0.0028	0.0039
Sodium, Other		311.99	2	0.1134	0.0165	0.0038	2	0.1134	0.0165	0.0038
Method Group 311.XX PCT			3	0.1100	0.0139	0.0038	3	0.1100	0.0139	0.0038
Acid Soluble Zinc, Atomic Absorption ..	975.02	321.00	6	0.0880	0.0080	0.0041	6	0.0880	0.0080	0.0041
Acid Soluble Zin, ICP		321.30	12	0.0914	0.0078	0.0050	12	0.0914	0.0078	0.0050
Acid Soluble Zinc, Other		321.99	3	0.0924	0.0088	0.0025	3	0.0924	0.0088	0.0025
Method Group 321.XX PCT			21	0.0906	0.0080	0.0044	21	0.0906	0.0080	0.0044

MAGRUDER - Fertilizer Check Sample No. - 200202 Grade 12-6-0-14S

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 001.10	--
193	15.400	.00
--	Method 001.99	--
320	15.040	.71
--	Method 001.XX	--
193	15.400	.87
Avg	15.220	
320	15.040	-.87
--	Method 010.11	--
288	16.365	1.94
114	16.160	.99
090	16.135	.88
414	15.965 R	.54
029	16.035	.41
Avg	15.948	
073	15.900	-.26
363	15.855	-.50
157	15.835	-.54
395	15.785	-.77
322	15.717	-1.07
211	15.690	-1.21
309	15.200 S	-3.48
--	Method 010.12	--
397	16.541 X	1.68
351	16.211	.33
102	16.195	.27
Avg	16.134	
416	16.038	-.55
185	15.955	-.95
326	15.865	-1.13
415	14.678 S	-6.02
--	Method 010.60	--
220	16.510 s	3.45
361	16.560 s	3.00
233	16.515	2.63
024	16.515	2.63
043	16.340 R	1.60
334	16.370	1.46
369	16.340	1.27
330	16.300	.87
292	16.275	.68
095	16.260	.60
142	16.250	.49
377	16.230	.39
106	16.225	.29
029	16.220	.27
037	16.220	.22
275	16.210	.21
325	16.215	.18
Avg	16.193	
234	16.190	-.09
096	16.180	-.13
389	16.185	-.14
027	16.178	-.16
131	16.175	-.25
232	16.160	-.28
040	16.175	-.32
296	16.170	-.38
028	16.145	-.41
262	16.150	-.43
390	16.150	-.48
086	16.145	-.60
023	16.110	-.68
007	16.100	-.76
376	16.085	-.88
136	16.075	-.96
324	16.165 R	-1.20
041	16.050	-1.24
049	16.025	-1.40
394	16.010	-1.53
009	15.960	-1.93
025	1.4300 s	-120.39
--	Method 010.99	--
220	16.280 R	1.29
024	16.340	1.19
057	16.275	.99
177	16.209	.76
405	16.085	.39
300	16.015	.16
Avg	15.969	
417	15.750	-.70
042	15.580	-1.26
030	15.495	-1.51
--	Method 010.XX	--
220	16.510 R	2.15
361	16.560	1.97
397	16.541 X	1.88
024	16.515	1.76
233	16.515	1.76
220	16.280 R	1.37
043	16.340	1.13
334	16.370	1.11
288	16.365	1.08
369	16.340	1.00
024	16.340	.99
330	16.300	.79
057	16.275	.72
292	16.275	.68
324	16.165 R	.68
095	16.260	.62
142	16.250	.57
377	16.230	.49
106	16.225	.46
029	16.220	.44
037	16.220	.43
325	16.215	.41
351	16.211	.40
275	16.210	.39
177	16.209	.38
102	16.195	.34
--	Method 010.XX	--
234	16.190	.30
389	16.185	.28
040	16.175	.28
296	16.170	.27
086	16.145	.26
131	16.175	.25
096	16.180	.25
027	16.178	.24
390	16.150	.21
262	16.150	.18
114	16.160	.16
232	16.160	.16
090	16.135	.12
028	16.145	.11
Avg	16.125	
023	16.110	-.08
007	16.100	-.11
376	16.085	-.18
136	16.075	-.23
405	16.085	-.24
041	16.050	-.41
029	16.035	-.41
049	16.025	-.48
300	16.015	-.50
394	16.010	-.55
416	16.038	-.57
009	15.960	-.77
414	15.965	-.89
185	15.955 R	-1.01
073	15.900	-1.03
326	15.865	-1.20
363	15.855	-1.24
157	15.835	-1.31
395	15.785	-1.54
417	15.750	-1.69
322	15.717	-1.84
211	15.690	-1.97
042	15.580	-2.49
--	Method 010.XX	--
030	15.495	-2.85
309	15.200 s	-4.18
415	14.678 s	-6.55
025	1.4300 s	-66.37
--	Method 020.10	--
114	2.3750 S	17.20
090	1.1250	1.46
095	1.0750	.57
Avg	1.0463	
049	1.0000	-.64
313	0.9850	-.80
320	0.0850 S	-12.13
--	Method 020.20	--
395	7.1950 s	16.93
292	2.1500	2.22
030	1.6700	.83
369	1.5450	.46
376	1.4900	.31
309	1.4500	.24
Avg	1.3865	
324	1.2600	-.37
334	1.1450	-.70
390	1.1450 R	-.73
288	1.0750	-.91
220	1.0550	-.97
232	1.0250	-1.05
--	Method 020.30	--
416	1.0272	-.71
--	Method 020.40	--
096	1.5500	.98
142	1.5200	.82
Avg	1.3550	
193	1.2500	-.52
394	1.1000	-1.27

* 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. - 200202 Grade 12-6-0-14S

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 020.50 --	
330	1.1300	1.03
389	1.1050	.70
361	1.0950	.57
Avg	1.0519	
417	0.9732	-1.03
157	0.9563	-1.25
--	Method 020.99 --	
042	5.8800 S	.00
414	1.0800 X	.00
Avg	1.0800	
--	Method 020.XX --	
395	7.1950 s	27.28
042	5.8800 s	21.29
114	2.3750 s	5.53
292	2.1500 A	4.33
030	1.6700	2.15
096	1.5500	1.61
369	1.5450	1.58
142	1.5200	1.47
376	1.4900	1.33
309	1.4500	1.17
324	1.2600	.29
193	1.2500	.23
Avg	1.1983	
334	1.1450	-.25
330	1.1300	-.31
390	1.1450 R	-.38
389	1.1050	-.43
394	1.1000	-.46
361	1.0950	-.47
090	1.1250 R	-.51
414	1.0800 X	-.54
288	1.0750	-.56
095	1.0750	-.58
220	1.0550	-.65
416	1.0272	-.78
--	Method 020.XX --	
232	1.0250	-.79
049	1.0000	-.91
313	0.9850	-.97
417	0.9732	-1.02
157	0.9563	-1.10
320	0.0850 s	-5.06
--	Method 030.10 --	
090	0.0000	.00
--	Method 030.20 --	
220	0.1450	-.71
--	Method 030.XX --	
220	0.1450	.87
Avg	0.0725	
090	0.0000	-.86
--	Method 040.10 --	
090	1.1250	1.12
Avg	1.0825	
136	1.0400	-.50
--	Method 040.20 --	
234	2.4300	.87
Avg	1.6700	
220	0.9100	-.87
--	Method 040.40 --	
394	0.9650	.71
--	Method 040.99 --	
027	0.9775	-.71
--	Method 040.XX --	
234	2.4300	1.89
Avg	1.2645	
090	1.1250 R	-.27
--	Method 040.XX --	
136	1.0400	-.36
027	0.9775	-.47
394	0.9650	-.49
220	0.9100	-.58
--	Method 041.10 --	
185	1.1000	1.77
322	1.1064	1.54
040	1.0600	1.19
Avg	0.9493	
211	0.9290	-.20
296	0.9300	-.21
028	0.9200	-.30
131	0.9200	-.35
086	0.9115	-.37
029	0.9000	-.48
009	0.8650	-.84
326	0.8000	-1.49
041	0.8600 R	-1.71
--	Method 041.20 --	
415	5.5861 S	133.81
397	1.0206	1.29
Avg	0.9769	
260	0.9550	-.65
106	0.9550	-.65
--	Method 041.30 --	
260	0.9750	.71
--	Method 041.40 --	
025	16.100 S	63.38
023	1.4750	.95
029	1.3200	.28
Avg	1.2533	
131	0.9650	-1.23
--	Method 041.50 --	
300	9.5950 s	34.61
102	1.5250	1.62
023	1.1550 R	.40
Avg	1.1288	
007	1.0000	-.53
361	0.9950	-.55
325	0.9950	-.55
--	Method 041.60 --	
028	1.4750	2.30
177	1.3030	1.32
351	1.1410	.40
043	1.1250	.36
Avg	1.0718	
397	1.0110	-.35
262	1.0100	-.37
288	1.0050	-.41
377	0.9500	-.75
296	0.9400	-.75
095	0.9300	-.82
073	0.8995	-.99
--	Method 041.99 --	
057	1.0150	.81
Avg	0.9975	
405	0.9800	-.92
--	Method 041.XX --	
025	16.100 s	84.59
300	9.5950 s	48.06
415	5.5861 s	25.55
102	1.5250	2.73
028	1.4750	2.45
023	1.4750	2.45
029	1.3200	1.58
177	1.3030	1.49
023	1.1550 R	.84
185	1.1000 R	.66
--	Method 041.XX --	
351	1.1410	.58
043	1.1250	.52
322	1.1064	.38
040	1.0600	.31
Avg	1.0384	
397	1.0206	-.11
397	1.0110	-.16
057	1.0150	-.19
262	1.0100	-.20
007	1.0000	-.22
288	1.0050	-.23
325	0.9950	-.25
361	0.9950	-.25
405	0.9800	-.37
260	0.9750	-.41
131	0.9650	-.42
106	0.9550	-.47
260	0.9550	-.47
296	0.9400	-.56
377	0.9500	-.57
296	0.9300	-.61
211	0.9290	-.61
095	0.9300	-.62
028	0.9200	-.67
131	0.9200	-.67
086	0.9115	-.71
029	0.9000	-.78
073	0.8995	-.79
009	0.8650	-.98
041	0.8600 R	-1.31
326	0.8000	-1.35
--	Method 050.51 --	
377	0.2500	.71
--	Method 050.60 --	
288	0.0650	.71

* 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. - 200202 Grade 12-6-0-14S

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 050.99 --	
232	18.700	.71
--	Method 050.XX --	
232	18.700	1.29
Avg	6.3383	
377	0.2500	-.64
288	0.0650	-.66
--	Method 060.00 --	
320	1.2850	1.18
363	1.2500	1.07
Avg	0.9543	
361	0.8150	-.50
007	0.7900	-.59
416	0.6316	-1.17
--	Method 101.30 --	
393	0.7250	.84
320	0.7224	.72
131	0.7210	.68
102	0.7104	.24
Avg	0.7053	
417	0.6929	-.53
009	0.6603	-1.87
--	Method 121.00 --	
193	0.1850	.71
--	Method 121.30 --	
102	0.1844	1.35
131	0.1800	.76
393	0.1750	.67
417	0.1744	.07
Avg	0.1743	
009	0.1661	-1.11
320	0.1661	-1.19
--	Method 121.XX --	
193	0.1850	1.28
102	0.1844	1.05
131	0.1800	.51
Avg	0.1758	
417	0.1744	-.19
393	0.1750	-.62
009	0.1661	-1.20
320	0.1661	-1.27
--	Method 131.99 --	
040	1.0800	.88
Avg	0.9735	
042	0.8670	-.85
--	Method 144.01 --	
114	18.835 s	2.54
288	18.810	2.09
351	18.355	1.01
043	18.250	.79
157	18.203	.65
324	17.995	.42
Avg	17.930	
095	17.920	-.03
296	17.860	-.29
086	17.725	-.62
102	17.615	-.75
193	17.580	-.83
395	17.580	-.84
363	17.270	-1.57
262	14.620 s	-7.86
--	Method 144.02 --	
292	19.595	.71
--	Method 144.99 --	
275	23.555 s	7.22
027	19.780	2.25
397	18.887	1.08
--	Method 144.99 --	
330	18.845	1.03
029	18.485 X	.55
023	18.375	.43
220	18.375	.41
177	18.342	.36
417	18.295	.30
394	18.205	.21
Avg	18.068	
057	18.000	-.10
393	17.855	-.29
009	17.892	-.31
136	17.840	-.31
040	17.765	-.40
405	17.640	-.56
028	17.380	-.91
376	16.980	-1.46
300	16.275	-2.36
030	16.200 R	-2.48
389	0.6950 s	-22.87
--	Method 144.XX --	
275	23.555 s	7.32
027	19.780	2.34
292	19.595	2.10
114	18.835 R	1.33
397	18.887	1.16
330	18.845	1.11
288	18.810	1.06
029	18.485 X	.63
023	18.375	.51
220	18.375	.49
351	18.355	.46
177	18.342	.45
417	18.295	.38
043	18.250	.35
394	18.205	.29
157	18.203	.26
Avg	18.005	
--	Method 144.XX --	
057	18.000	-.05
095	17.920	-.11
393	17.855	-.21
324	17.995	-.22
296	17.860	-.23
136	17.840	-.24
009	17.892	-.25
040	17.765	-.32
086	17.725	-.43
405	17.640	-.48
102	17.615	-.52
193	17.580	-.56
395	17.580	-.56
028	17.380	-.83
363	17.270	-.97
376	16.980	-1.38
300	16.275	-2.28
030	16.200	-2.40
262	14.620 s	-4.47
389	0.6950 s	-22.82
--	Method 151.30 --	
389	1.1500	.87
Avg	0.8541	
102	0.5583	-.86
--	Method 151.99 --	
042	1.6600	1.13
Avg	1.2583	
220	1.2500	-.14
040	0.8650	-1.10
--	Method 151.XX --	
042	1.6600	1.44
220	1.2500	.41
389	1.1500	.19
Avg	1.0967	
040	0.8650	-.59
--	Method 151.XX --	
102	0.5583	-1.37
--	Method 165.99 --	
009	0.0047	.71
--	Method 181.00 --	
220	1.0500	.71
--	Method 181.30 --	
023	1.2200	1.22
324	1.1000	.80
232	1.0000 R	.57
102	1.0015	.45
009	0.9850	.44
Avg	0.8738	
157	0.8500	-.08
389	0.5400	-1.18
376	0.4200	-1.61
--	Method 181.XX --	
023	1.2200	1.21
324	1.1000	.74
220	1.0500	.58
232	1.0000	.53
009	0.9850	.37
102	1.0015	.36
Avg	0.9074	
157	0.8500	-.22
389	0.5400	-1.42
376	0.4200	-1.89
--	Method 191.00 --	
220	29.500	.71
--	Method 191.30 --	
009	29.685	.83
Avg	29.329	
102	28.974	-.90

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

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 191.XX --	
220	29.500	.87
009	29.685	.83
Avg	29.386	
102	28.974	-1.03
--	Method 202.30 --	
009	5.5100	1.82
232	3.4000	.37
324	3.3500	.30
389	3.0000	.06
Avg	2.9190	
023	2.3500	-.40
102	2.1228	-.57
320	0.7000	-1.57
--	Method 202.99 --	
042	4.7200	-.71
--	Method 202.XX --	
009	5.5100	1.61
042	4.7200	1.10
232	3.4000	.22
324	3.3500	.14
Avg	3.1441	
389	3.0000	-.10
023	2.3500	-.54
102	2.1228	-.71
320	0.7000	-1.68
--	Method 221.00 --	
086	0.0229 R	5.67
029	0.0200	1.43
095	0.0193	.36
157	0.0193	.36
Avg	0.0190	
028	0.0189	-.23
043	0.0187	-1.05
390	0.0180	-1.43
--	Method 221.30 --	
102	0.0229	2.03
330	0.0221 R	1.56
232	0.0213	1.05
009	0.0202	.40
Avg	0.0196	
393	0.0196	-.03
324	0.0195	-.07
300	0.0195	-.07
131	0.0191	-.33
040	0.0190	-.35
023	0.0180	-.99
389	0.0168	-1.71
--	Method 221.99 --	
220	0.0213	.90
057	0.0206	.34
Avg	0.0201	
042	0.0186	-1.26
--	Method 221.XX --	
086	0.0229 R	2.28
102	0.0229	2.19
330	0.0221	1.67
232	0.0213	1.10
220	0.0213	1.09
057	0.0206	.62
009	0.0202	.38
029	0.0200	.24
Avg	0.0197	
393	0.0196	-.08
324	0.0195	-.13
300	0.0195	-.14
157	0.0193	-.28
095	0.0193	-.28
131	0.0191	-.43
040	0.0190	-.45
028	0.0189	-.55
042	0.0186	-.75
--	Method 221.XX --	
043	0.0187 R	-.82
390	0.0180	-1.13
023	0.0180	-1.17
389	0.0168	-1.96
--	Method 241.00 --	
086	0.5967	.71
--	Method 241.30 --	
102	0.7050	1.16
320	0.6976	.70
417	0.6919	.25
Avg	0.6883	
131	0.6810	-.55
009	0.6661	-1.52
--	Method 241.99 --	
057	0.6797	.71
--	Method 241.XX --	
102	0.7050	.88
320	0.6976	.68
417	0.6919	.50
131	0.6810	.23
057	0.6797	.16
Avg	0.6740	
009	0.6661	-.28
086	0.5967	-2.20
--	Method 251.00 --	
028	51.450	.87
Avg	45.586	
397	39.722	-.86
--	Method 251.30 --	
389	57.500	1.35
102	47.857	.76
232	46.000	.66
324	40.000	.30
157	39.950	.29
Avg	35.059	
009	27.065	-.48
023	15.500	-1.17
376	6.6000	-1.70
--	Method 251.99 --	
040	45.460	.79
220	39.500	.51
Avg	30.573	
042	6.7600	-1.27
--	Method 251.XX --	
389	57.500	1.32
028	51.450	.95
102	47.857	.74
232	46.000	.63
040	45.460	.60
220	39.500 R	.32
324	40.000	.28
157	39.950	.27
397	39.722	.26
Avg	35.322	
009	27.065	-.49
023	15.500	-1.17
042	6.7600	-1.69
376	6.6000	-1.70
--	Method 261.00 --	
086	0.0132	.71
--	Method 261.30 --	
102	0.0140	1.00
009	0.0138	.88
Avg	0.0129	
320	0.0120	-.78
393	0.0117	-1.06
--	Method 261.99 --	
057	0.0135	.00
--	Method 261.XX --	
102	0.0140	1.00
009	0.0138	.86
086	0.0132	.72
057	0.0135	.46
Avg	0.0130	
320	0.0120	-1.05
393	0.0117	-1.38
--	Method 281.00 --	
028	0.8050	.72
232	0.7500	.58
Avg	0.5367	
363	0.0550	-1.28
--	Method 281.30 --	
376	0.8800	.71
--	Method 281.99 --	
300	0.8000	.75
220	0.7200	.50
040	0.6750	.36
Avg	0.5633	
042	0.0580	-1.60
--	Method 281.XX --	
376	0.8800	.88
028	0.8050	.65
300	0.8000	.64
232	0.7500	.51
220	0.7200	.39
040	0.6750	.26
Avg	0.5929	
042	0.0580	-1.64
363	0.0550	-1.65

* 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. - 200202 Grade 12-6-0-14S

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 289.30 --	
009	8.1850 s	7.85
102	3.1238	1.12
232	3.0000	.97
324	2.3000	.06
Avg	2.2558	
157	1.4550	-1.03
389	1.4000	-1.11
--	Method 289.99 --	
042	4.1300	1.18
Avg	3.2600	
220	3.0500	-.55
040	2.6000	-.90
--	Method 289.XX --	
009	8.1850 s	6.19
042	4.1300	1.67
220	3.0500 R	.64
102	3.1238	.60
232	3.0000	.47
040	2.6000	.11
Avg	2.5727	
324	2.3000	-.29
157	1.4550	-1.20
389	1.4000	-1.26
--	Method 291.00 --	
220	15.000	.78
Avg	14.811	
397	14.621	-.94
--	Method 291.30 --	
023	41.500 S	10.75
102	18.693	1.35
009	17.020	.66
232	16.500	.49
Avg	15.436	
157	15.350	-.04

Lab	Average*	Index
--	Method 291.30 --	
324	12.900	-1.05
376	12.150	-1.38
--	Method 291.XX --	
023	41.500 s	12.50
102	18.693	1.63
009	17.020	.84
232	16.500	.63
157	15.350	.04
Avg	15.279	
220	15.000	-.13
397	14.621	-.32
324	12.900	-1.14
376	12.150	-1.52
--	Method 301.99 --	
042	3.6000	1.61
Avg	1.6713	
296	1.1950	-.40
040	1.0900	-.49
389	0.8000	-.72
--	Method 311.30 --	
320	0.1031	-.71
--	Method 311.99 --	
102	0.1275	.88
Avg	0.1134	
009	0.0994	-.85
--	Method 311.XX --	
102	0.1275	1.28
Avg	0.1100	
320	0.1031	-.52
009	0.0994	-.76
--	Method 321.00 --	
234	0.1300 S	5.22

Lab	Average*	Index
--	Method 321.00 --	
086	0.1009	1.70
029	0.0915	.44
Avg	0.0880	
028	0.0872	-.11
095	0.0837	-.53
043	0.0870	-.63
390	0.0775	-1.31
--	Method 321.30 --	
330	0.1050	1.86
009	0.1005	1.39
102	0.0977	.82
376	0.0950	.69
040	0.0920	.52
131	0.0920	.15
Avg	0.0914	
157	0.0904	-.13
324	0.0893	-.30
232	0.0865	-.80
320	0.0849	-.84
300	0.0834	-1.11
023	0.0807	-1.40
389	0.0407 s	-6.55
--	Method 321.99 --	
057	0.1028	1.19
Avg	0.0924	
220	0.0907	-.29
042	0.0837	-1.00
--	Method 321.XX --	
234	0.1300 s	4.95
330	0.1050	1.92
057	0.1028	1.54
009	0.1005	1.45
086	0.1009	1.41
102	0.0977	.91
376	0.0950	.75

Lab	Average*	Index
--	Method 321.XX --	
040	0.0920	.53
220	0.0907	.24
131	0.0920	.22
029	0.0915	.13
Avg	0.0906	
157	0.0904	-.02
324	0.0893	-.19
028	0.0872	-.43
232	0.0865	-.69
320	0.0849	-.71
043	0.0870	-.77
095	0.0837	-.87
042	0.0837	-.87
300	0.0834	-.98
023	0.0807	-1.26
390	0.0775	-1.65
389	0.0407 s	-6.27

Lab	Average*	Index

* 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. - 200202 Grade 12-6-0-14S

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.XX	2	0.0000	1.22	0.03	181.XX	9	0.0000	1.01	0.17
010.11	12	-0.2831	1.36	0.19	191.30	2	0.0000	0.80	0.66
010.12	7	-0.8583	2.44	0.33	191.XX	3	0.0000	0.63	0.76
010.60	39	-2.9190	19.34	0.49	202.30	7	0.0000	1.03	0.11
010.99	9	0.1101	1.01	0.30	202.XX	8	0.0000	1.03	0.12
010.XX	64	-1.2161	8.38	0.28	221.00	7	0.7921	2.27	0.56
020.10	6	0.7727	9.24	1.65	221.30	11	0.1395	1.08	0.10
020.20	12	1.3516	4.99	0.10	221.99	3	0.0000	1.10	0.14
020.40	4	0.0000	1.07	0.10	221.XX	21	0.0727	1.09	0.18
020.50	5	0.0000	1.06	0.07	241.30	5	0.0000	1.00	0.31
020.99	2	0.0000	0.00	0.00	241.XX	7	0.0000	1.02	0.19
020.XX	30	1.7535	6.43	0.29	251.00	2	0.0000	1.21	0.11
030.XX	2	0.0000	1.22	0.04	251.30	8	0.0000	1.03	0.06
040.10	2	0.0000	0.71	0.71	251.99	3	0.0000	1.11	0.11
040.20	2	0.0000	1.22	0.00	251.XX	13	0.0190	0.98	0.08
040.XX	6	-0.0378	0.95	0.06	261.30	4	0.0000	1.06	0.18
041.10	12	-0.0728	0.95	0.54	261.XX	6	0.0000	0.98	0.33
041.20	4	33.4433	66.89	1.52	281.00	3	0.0000	1.11	0.09
041.40	4	15.8458	31.70	0.05	281.99	4	0.0000	1.08	0.05
041.50	6	5.7861	14.15	0.16	281.XX	8	0.0000	1.03	0.07
041.60	11	0.0000	1.02	0.13	289.30	6	1.2766	3.27	0.70
041.99	2	0.0000	0.66	0.73	289.99	3	0.0000	1.06	0.29
041.XX	33	4.7574	17.13	0.45	289.XX	9	0.7264	2.19	0.49
050.XX	3	0.0000	1.12	0.00	291.00	2	0.0000	1.11	0.37
060.00	5	0.0000	1.05	0.12	291.30	7	1.5360	4.17	0.16
060.XX	5	0.0000	1.05	0.12	291.XX	9	1.3890	4.28	0.17
101.30	6	0.0000	1.04	0.15	301.99	4	0.0000	1.08	0.06
101.XX	6	0.0000	1.04	0.15	301.XX	4	0.0000	1.08	0.06
121.30	6	0.0000	0.98	0.33	311.99	2	0.0000	1.21	0.15
121.XX	7	0.0000	0.96	0.37	311.XX	3	0.0000	1.10	0.16
131.99	2	0.0000	1.20	0.17	321.00	7	0.7462	2.17	0.32
131.XX	2	0.0000	1.20	0.17	321.30	13	-0.5036	2.02	0.39
144.01	14	-0.4073	2.40	0.43	321.99	3	0.0000	1.10	0.15
144.99	21	-0.8620	5.40	0.11					
144.XX	36	-0.5244	4.20	0.17					
151.30	2	0.0000	1.21	0.11					
151.99	3	0.0000	1.11	0.10					
151.XX	5	0.0000	1.06	0.10					
181.30	8	0.0556	0.97	0.15					