MAGRUDER - Fertilizer Check Sample No. - 200204 Grade 5-10-30

Method	AOAC Ref.	Method Code	- Pass 1 Results for 89 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 87 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Ammoniacal Nitrogen, Other		001.99	3	6.0033	0.0695	0.0400	3	6.0033	0.0695	0.0400
Ammon & Nitrate N, Devarda	892.01	009.10	8	6.1159	0.1054	0.0860	8	6.1159	0.1054	0.0860
Total Nitrogen, Modified Comprehensive	978.02	010.11	10	6.1800	0.0462	0.0320	9	6.1794	0.0450	0.0233
Total Nitrogen, Salicylic	955.04D	010.12	8	6.1412	0.0945	0.0244	8	6.1412	0.0945	0.0244
Total Nitrogen, Combustion		010.60	48	6.2384	0.1126	0.0564	46	6.2432	0.1074	0.0449
Total Nitrogen, Other		010.99	3	6.1710	0.0490	0.0347	3	6.1710	0.0490	0.0347
Method Group 010.XX PCT			71	6.2153	0.1145	0.0480	68	6.2196	0.1110	0.0381
Total Phosphate, Grav Quimociac	962.02	020.10	9	10.424	0.1571	0.1298	8	10.434	0.1302	0.0773
Total Phosphate, Spectrometric	958.01	020.20	19	10.482	0.1495	0.0640	19	10.482	0.1495	0.0640
Total Phosphate, Alka. Quimociac	969.02	020.30	1	10.458	0.0048	0.0068	1	10.458	0.0048	0.0068
Total Phosphate, Automated	978.01	020.40	7	10.476	0.1028	0.0643	7	10.476	0.1028	0.0643
Total Phosphate, ICP		020.50	2	10.422	0.2294	0.0327	2	10.422	0.2294	0.0327
Total Phosphate, Other		020.99	3	10.413	0.0789	0.0267	3	10.413	0.0789	0.0267
Method Group 020.XX PCT			41	10.460	0.1422	0.0728	39	10.464	0.1356	0.0558
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	2	0.1475	0.0974	0.0350	2	0.1475	0.0974	0.0350
Insoluble Phosphate, Automated	978.01	030.40	4	0.0913	0.0264	0.0275	4	0.0913	0.0264	0.0275
Insoluble Phosphate, Other		030.99	1	0.0150	0.0071	0.0100	1	0.0150	0.0071	0.0100
Method Group 030.XX PCT			8	0.0844	0.0700	0.0238	8	0.0844	0.0700	0.0238
InDir Available Phosphate, Grav Quim ..	960.02	040.10	2	10.670	0.1763	0.0400	2	10.670	0.1763	0.0400
InDir Available Phosphate, Spectrometri	960.02	040.20	2	10.218	0.0954	0.1350	2	10.218	0.0954	0.1350
InDir Available Phosphate, Automated ..	960.02	040.40	4	10.423	0.1335	0.0600	4	10.423	0.1335	0.0600
InDir Available Phosphate, Other		040.99	1	10.420	0.0990	0.1400	1	10.420	0.0990	0.1400
Method Group 040.XX PCT			9	10.432	0.1980	0.0811	9	10.432	0.1980	0.0811
Dir Available Phosphate, Grav Quim	960.03E	041.10	21	10.457	0.1003	0.0453	19	10.462	0.0949	0.0311
Dir Available Phosphate, Spectrometric	960.03D	041.20	5	10.435	0.1861	0.0644	5	10.435	0.1861	0.0644
Dir Available Phosphate, Alka. Quim ...	960.03C	041.30	1	10.385	0.0354	0.0500	1	10.385	0.0354	0.0500
Dir Available Phosphate, Automated	978.01	041.40	5	10.282	0.1730	0.0226	5	10.282	0.1730	0.0226
Dir Available Phosphate, ICP		041.50	6	10.359	0.1714	0.0417	6	10.359	0.1714	0.0417
Dir Available Phosphate, EDTA Extract .	993.01	041.60	11	10.422	0.1410	0.0629	11	10.422	0.1410	0.0629
Method Group 041.XX PCT			49	10.415	0.1446	0.0485	46	10.420	0.1424	0.0393
Water Soluble Phosphate, Spectrometric	970.01	048.20	4	8.9713	0.1790	0.2075	4	8.9713	0.1790	0.2075
Water Soluble Phosphate, Other		048.99	1	8.2300	0.0849	0.1200	1	8.2300	0.0849	0.1200
Method Group 048.XX PCT			5	8.8230	0.3513	0.1900	5	8.8230	0.3513	0.1900
Soluble Potash, STPB Oxalate	958.02	050.00	27	29.020	0.2801	0.0946	27	29.020	0.2801	0.0946
Soluble Potash, STPB Citrate	969.04	050.10	1	29.137	0.1272	0.1799	1	29.137	0.1272	0.1799
Soluble Potash, AA (Oxalate)		050.30	7	29.421	0.7364	0.2186	8	29.500	1.0866	0.1525
Soluble Potash, ICP (Oxalate)		050.50	3	28.527	0.3168	0.2667	3	28.527	0.3168	0.2667
Soluble Potash, ICP (Citrate)		050.51	7	29.035	0.5237	0.1729	7	29.035	0.5237	0.1729

Method	AOAC Ref.	Method Code	Pass 1 No. of Labs	Pass 1 Grand Avg.	Pass 1 Std. Dev.	Pass 1 Average Range of Dups	Pass 2 No. of Labs	Pass 2 Grand Avg.	Pass 2 Std. Dev.	Pass 2 Average Range of Dups
			- Pass 1 Results for 89 Labs -				- Pass 2 Results for 87 Labs -			
Soluble Potash, Flame (Oxalate)	983.02(a	050.60	8	29.233	0.5079	0.1140	8	29.233	0.5079	0.1140
Soluble Potash, Flame (Citrate)	983.02(b	050.61	8	28.938	0.1555	0.1612	8	28.938	0.1555	0.1612
Soluble Potash, Other		050.99	13	28.936	0.6123	0.2818	12	28.878	0.5684	0.1937
Method Group 050.XX PCT			75	29.053	0.4876	0.1620	70	29.062	0.4049	0.1258
Free Water, Vacuum Oven	965.08B	060.00	5	0.8090	0.0970	0.0519	4	0.7999	0.0978	0.0224
Free Water, Other		060.99	1	0.8150	0.0071	0.0100	1	0.8150	0.0071	0.0100
Method Group 060.XX PCT			6	0.8100	0.0878	0.0449	5	0.8030	0.0865	0.0199
Acid Soluble Calcium, ICP		101.30	5	0.7856	0.0651	0.0301	5	0.7856	0.0651	0.0301
Acid Soluble Magnesium, AA	984.01	121.00	1	0.2520	0.0057	0.0080	1	0.2520	0.0057	0.0080
Acid Soluble Magnesium, ICP		121.30	5	0.4062	0.0252	0.0139	5	0.4062	0.0252	0.0139
Method Group 121.XX PCT			6	0.3805	0.0642	0.0129	6	0.3805	0.0642	0.0129
Water Soluble Magnesium, AA		131.00	1	0.1640	0.0438	0.0620	1	0.1640	0.0438	0.0620
Water Soluble Magnesium, Other		131.99	1	4.2300	0.0849	0.1200	1	4.2300	0.0849	0.1200
Method Group 131.XX PCT			2	2.1970	2.3482	0.0910	2	2.1970	2.3482	0.0910
Sulfur, Gravimetric	980.02a	144.01	16	4.9084	0.0848	0.0622	15	4.9113	0.0824	0.0524
Sulfur, Gravimetric	980.02b	144.02	1	4.7750	0.0212	0.0300	1	4.7750	0.0212	0.0300
Sulfur, Gravimetric	980.02c	144.03	1	4.7100	0.0283	0.0400	1	4.7100	0.0283	0.0400
Sulfur, Turbidimetric	63.845	144.50	1	4.8850	0.0919	0.1300	1	4.8850	0.0919	0.1300
Sulfur, Other		144.99	18	4.7933	0.2071	0.0660	18	4.7933	0.2071	0.0660
Method Group 144.XX PCT			38	4.8492	0.1733	0.0761	37	4.8428	0.1659	0.0644
Arsenic, ICP		151.30	2	3.1448	0.7191	0.3065	2	3.1448	0.7191	0.3065
Arsenic, Other		151.99	3	4.2517	0.6340	0.1967	3	4.2517	0.6340	0.1967
Method Group 151.XX PPM			5	3.8089	0.8500	0.2406	5	3.8089	0.8500	0.2406
Acid Soluble Boron, Spectrometric	982.01	165.00	11	0.0520	0.0043	0.0027	10	0.0518	0.0042	0.0021
Acid Soluble Boron, Titrimetric	949.02	165.70	1	0.0475	0.0035	0.0050	1	0.0475	0.0035	0.0050
Acid Soluble Boron, Other		165.99	12	0.0521	0.0054	0.0014	12	0.0521	0.0054	0.0014
Method Group 165.XX PCT			24	0.0519	0.0048	0.0021	23	0.0518	0.0048	0.0018
Water Soluble Boron, Spectrometric	982.01	171.10	1	0.0700	0.0000	0.0000	1	0.0700	0.0000	0.0000
Cadmium, Atomic Absorption		181.00	5	3.6538	0.3697	0.1224	5	3.6538	0.3697	0.1224
Cadmium, ICP		181.30	10	3.4639	0.6556	0.2111	9	3.3488	0.5574	0.1234
Cadmium, Other		181.99	1	4.1500	0.0707	0.1000	1	4.1500	0.0707	0.1000
Method Group 181.XX PPM			16	3.5661	0.5784	0.1764	14	3.4959	0.5370	0.0852
Water Soluble Chlorine, Titrimetric ...	928.02	190.00	1	22.328	0.0106	0.0150	1	22.328	0.0106	0.0150
Water Soluble Chlorine, Other		190.99	1	22.558	0.0034	0.0048	1	22.558	0.0034	0.0048
Method Group 190.XX PCT			2	22.443	0.1333	0.0099	2	22.443	0.1333	0.0099
Chromium, Atomic Absorption		191.00	2	100.50	14.617	14.000	2	100.50	14.617	14.000
Chromium, ICP		191.30	4	73.870	15.605	2.6142	4	73.870	15.605	2.6142
Method Group 191.XX PPM			6	82.747	19.625	6.4095	5	77.396	15.658	2.6914
Acid Soluble Cobalt, AA		202.00	3	42.217	11.307	2.2337	3	42.217	11.307	2.2337

Method	AOAC Ref.	Method Code	- Pass 1 Results for 89 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 87 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Acid Soluble Cobalt, ICP	965.11	202.30	8	46.662	12.696	2.5059	8	46.662	12.696	2.5059
Acid Soluble Cobalt, Other		202.99	3	29.917	26.654	1.1667	3	29.917	26.654	1.1667
Method Group 202.XX PPM			14	42.121	17.033	2.1606	14	42.121	17.033	2.1606
Acid Soluble Copper, Atomic Absorption	975.01	221.00	4	0.0041	0.0006	0.0004	4	0.0041	0.0006	0.0004
Acid Soluble Copper, ICP		221.30	12	0.0047	0.0008	0.0002	12	0.0047	0.0008	0.0002
Acid Soluble Copper, Other		221.99	3	0.0046	0.0003	0.0002	3	0.0046	0.0003	0.0002
Method Group 221.XX PCT			19	0.0046	0.0007	0.0002	18	0.0046	0.0007	0.0002
Acid Soluble Iron, Atomic Absorption	980.01	241.00	21	0.5706	0.0647	0.0124	21	0.5706	0.0647	0.0124
Acid Soluble Iron, ICP		241.30	18	0.5483	0.0578	0.0154	17	0.5513	0.0578	0.0134
Acid Soluble Iron, Other		241.99	2	0.5520	0.0431	0.0617	2	0.5520	0.0431	0.0617
Method Group 241.XX PCT			41	0.5599	0.0612	0.0162	40	0.5606	0.0615	0.0145
Lead, Atomic Absorption		251.00	3	7.1073	2.6112	0.6475	3	7.1073	2.6112	0.6475
Lead, ICP		251.30	6	8.8512	2.9126	0.6974	6	8.8512	2.9126	0.6974
Lead, Other		251.99	2	8.8400	0.9331	0.9300	2	8.8400	0.9331	0.9300
Method Group 251.XX PPM			11	8.3736	2.6118	0.7261	11	8.3736	2.6118	0.7261
Acid Soluble Manganese, AA	972.02a	261.00	17	0.2038	0.0179	0.0042	17	0.2038	0.0179	0.0042
Acid Soluble Manganese, AA	972.02b	261.11	4	0.2071	0.0268	0.0103	4	0.2071	0.0268	0.0103
Acid Soluble Manganese, ICP	972.02a	261.30	13	0.2118	0.0135	0.0057	13	0.2118	0.0135	0.0057
Acid Soluble Manganese, ICP	972.02b	261.31	1	0.2350	0.0212	0.0300	1	0.2350	0.0212	0.0300
Acid Soluble Manganese, Other		261.99	5	0.2064	0.0115	0.0136	5	0.2064	0.0115	0.0136
Method Group 261.XX PCT			40	0.2078	0.0175	0.0071	38	0.2072	0.0171	0.0059
Water Soluble Manganese, Atomic Abs.	972.03	271.00	4	0.0754	0.1081	0.0033	3	0.0913	0.1229	0.0000
Water Soluble Manganese, ICP	972.03	271.30	1	0.0950	0.0032	0.0045	1	0.0950	0.0032	0.0045
Water Soluble Manganese, Other		271.99	2	0.0875	0.0519	0.0250	2	0.0875	0.0519	0.0250
Method Group 271.XX PCT			7	0.0816	0.0835	0.0096	6	0.0736	0.0876	0.0046
Mercury, Other		281.99	2	0.0336	0.0024	0.0023	2	0.0336	0.0024	0.0023
Molybdenum, Atomic Absorption		289.00	1	5.8500	0.7778	1.1000	1	5.8500	0.7778	1.1000
Molybdenum, ICP		289.30	9	6.5720	0.6761	0.3607	9	6.5720	0.6761	0.3607
Molybdenum, Other		289.99	2	5.9000	2.4590	0.5000	2	5.9000	2.4590	0.5000
Method Group 289.XX PPM			12	6.3999	1.1161	0.4455	12	6.3999	1.1161	0.4455
Nickel, Atomic Absorption		291.00	3	37.245	1.4522	1.1087	3	37.245	1.4522	1.1087
Nickel, ICP		291.30	8	35.807	4.2008	1.2432	7	35.422	4.2573	0.7065
Nickel, Other		291.99	2	32.075	12.065	1.3500	2	32.075	12.065	1.3500
Method Group 291.XX PPM			13	35.565	5.5804	1.2286	12	35.320	5.7003	0.9143
Selenium, Other		301.99	1	0.0850	0.0212	0.0300	1	0.0850	0.0212	0.0300
Sodium, Atomic Absorption	983.04	311.00	1	0.5625	0.0064	0.0090	1	0.5625	0.0064	0.0090
Sodium, Other		311.99	4	0.6098	0.0529	0.0105	4	0.6098	0.0529	0.0105
Method Group 311.XX PCT			5	0.6003	0.0508	0.0102	5	0.6003	0.0508	0.0102
Acid Soluble Zinc, Atomic Absorption	975.02	321.00	24	0.1544	0.0114	0.0047	22	0.1545	0.0106	0.0029

Method	AOAC Ref.	Method Code	- Pass 1 Results for 89 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups	- Pass 2 Results for 87 Labs - No. of Labs	Grand Avg.	Std. Dev.	Average Range of Dups
Acid Soluble Zin, ICP		321.30	14	0.1611	0.0081	0.0031	13	0.1608	0.0082	0.0025
Acid Soluble Zinc, Other		321.99	3	0.1524	0.0058	0.0028	3	0.1524	0.0058	0.0028
Method Group 321.XX PCT			41	0.1565	0.0105	0.0040	39	0.1567	0.0099	0.0029

MAGRUDER - Fertilizer Check Sample No. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 001.99 --	
096	6.0650	.96
320	6.0200	.24
Avg	6.0033	
193	5.9250	-1.23
--	Method 009.10 --	
030	6.2000	1.24
090	6.2300	1.12
258	6.1600	.63
200	6.1550	.50
169	6.1220	.19
Avg	6.1159	
392	6.0800	-.51
391	6.0500	-.78
257	5.9300	-1.77
--	Method 010.11 --	
322	6.4625 s	6.29
105	6.1850 R	1.23
405	6.2300	1.12
395	6.2150	.86
220	6.2100	.81
028	6.1850	.36
414	6.1850	.36
148	6.1800	.22
029	6.1800	.01
Avg	6.1794	
211	6.1500	-.79
288	6.0800	-2.22
363	5.9350 s	-5.48
114	5.7950 s	-11.32
--	Method 010.12 --	
162	6.3000	1.68
102	6.2220	.90
351	6.1980	.60
Avg	6.1412	
185	6.1250	-.18
416	6.1282	-.25
326	6.1150	-.32
137	6.0250	-1.26
415	6.0168	-1.32
--	Method 010.60 --	
325	6.5300	2.67
409	6.4200 s	2.56
157	6.4250	1.69
356	6.3800	1.33
043	6.3450	1.12
369	6.3550	1.05
131	6.3530	1.02
096	6.3350	.95
389	6.3400	.91
360	6.3200	.77
095	6.3150	.67
023	6.3100	.65
035	6.3000	.60
025	6.2950	.58
232	6.2950	.54
070	6.2950	.48
330	6.2500	.47
247	6.2850	.41
262	6.2700	.37
233	6.2800	.36
028	6.2550	.34
029	6.2800	.34
275	6.2750	.30
041	6.2700	.27
372	6.2550	.26
049	6.2500	.20
377	6.2600	.18
106	6.2500	.11
Avg	6.2432	
034	6.2350	-.09
292	6.2400	-.10
220	6.2250	-.22
--	Method 010.60 --	
086	6.2200	-.23
040	6.1950	-.51
024	6.1850	-.54
394	6.2050	-.55
381	6.1800	-.70
390	6.1700	-.74
142	6.1450	-.94
296	6.1500	-.98
073	6.1250	-1.15
009	6.1200	-1.18
055	6.1150	-1.22
361	6.1100	-1.24
324	6.0900	-1.43
007	6.1500 R	-1.64
057	6.0900	-1.65
018	6.0650	-1.66
037	6.1100 R	-2.01
027	5.9475	-2.75
042	5.8400 s	-4.85
--	Method 010.99 --	
234	6.1900	.90
024	6.2050	.70
Avg	6.1710	
177	6.1180	-1.09
--	Method 010.XX --	
325	6.5300	2.80
409	6.4200 s	2.61
322	6.4625	2.19
157	6.4250	1.85
356	6.3800	1.49
043	6.3450	1.27
369	6.3550	1.23
131	6.3530	1.20
096	6.3350	1.12
389	6.3400	1.09
360	6.3200	.94
--	Method 010.XX --	
095	6.3150	.86
023	6.3100	.83
035	6.3000	.77
025	6.2950	.75
162	6.3000	.72
232	6.2950	.72
070	6.2950	.68
247	6.2850	.60
233	6.2800	.55
029	6.2800	.54
262	6.2700	.53
330	6.2500	.53
275	6.2750	.50
041	6.2700	.46
028	6.2550	.45
372	6.2550	.39
377	6.2600	.37
049	6.2500	.33
106	6.2500	.29
102	6.2220	.24
292	6.2400	.20
034	6.2350	.15
220	6.2250	.14
405	6.2300	.09
086	6.2200	.09
Avg	6.2196	
024	6.2050	-.14
395	6.2150	-.14
351	6.1980	-.20
220	6.2100	-.20
024	6.1850	-.32
040	6.1950	-.32
414	6.1850	-.34
028	6.1850	-.34
029	6.1800	-.36
148	6.1800	-.37
394	6.2050	-.43
234	6.1900	-.45
--	Method 010.XX --	
381	6.1800	-.51
390	6.1700	-.52
105	6.1850	-.59
211	6.1500	-.65
142	6.1450	-.71
296	6.1500	-.77
416	6.1282	-.84
185	6.1250	-.85
073	6.1250	-.91
177	6.1180	-.92
009	6.1200	-.94
326	6.1150	-.95
055	6.1150	-.97
361	6.1100	-.99
324	6.0900	-1.17
288	6.0800	-1.26
018	6.0650	-1.40
057	6.0900 R	-1.42
007	6.1500 R	-1.49
137	6.0250	-1.77
037	6.1100 R	-1.82
415	6.0168	-1.83
027	5.9475	-2.45
363	5.9350	-2.58
042	5.8400 s	-4.53
114	5.7950 s	-4.87
--	Method 020.10 --	
095	10.590	1.24
414	10.525	.75
090	10.520	.73
313	10.445	.36
Avg	10.434	
148	10.410	-.20
030	10.400	-.26
162	10.390	-1.05
157	10.189	-1.88
114	10.345 R	-2.22

* 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. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 020.20	--
292	10.730	1.68
381	10.725	1.65
391	10.720	1.59
392	10.570	.62
258	10.550	.61
232	10.545	.42
395	10.535	.37
362	10.525	.30
356	10.505	.18
Avg	10.482	
257	10.440	-.28
324	10.445	-.30
372	10.440	-.39
200	10.440	-.39
288	10.405	-.52
390	10.395	-.66
363	10.390	-.73
220	10.350	-1.11
169	10.279	-1.37
369	10.170	-2.10
--	Method 020.30	--
416	10.458	-.71
--	Method 020.40	--
042	11.210 s	7.15
193	10.650	1.76
247	10.480	.78
394	10.540	.63
Avg	10.476	
096	10.450	-.32
035	10.470	-.49
142	10.380	-.94
409	10.365	-1.09
--	Method 020.50	--
389	12.210 S	7.80
330	10.945 S	2.30
--	Method 020.50	--
361	10.620	.87
Avg	10.422	
157	10.224	-.86
--	Method 020.99	--
300	10.505	1.20
Avg	10.413	
320	10.400	-.17
234	10.335	-1.01
--	Method 020.XX	--
389	12.210 s	12.88
042	11.210 s	5.51
330	10.945 s	3.58
292	10.730	1.98
381	10.725	1.95
391	10.720	1.89
193	10.650	1.42
361	10.620	1.16
095	10.590	.97
392	10.570	.81
258	10.550	.77
247	10.480	.60
232	10.545	.60
394	10.540	.56
395	10.535	.53
414	10.525	.52
090	10.520	.50
362	10.525	.46
035	10.470	.37
300	10.505	.35
356	10.505	.32
Avg	10.464	
416	10.458	-.05
257	10.440	-.18
096	10.450	-.18
324	10.445	-.23
372	10.440	-.35
--	Method 020.XX	--
200	10.440	-.35
313	10.445	-.36
148	10.410	-.41
288	10.405	-.44
320	10.400	-.48
030	10.400	-.48
390	10.395	-.61
142	10.380	-.63
363	10.390	-.71
409	10.365	-.73
234	10.335	-.96
162	10.390 R	-1.11
220	10.350	-1.12
169	10.279	-1.39
157	10.224	-1.78
157	10.189	-2.03
369	10.170	-2.18
114	10.345 R	-2.21
--	Method 030.10	--
090	0.0000	.00
--	Method 030.20	--
363	0.2300	.87
Avg	0.1475	
220	0.0650	-.86
--	Method 030.40	--
409	0.1050	1.42
096	0.0950	.59
193	0.1000	.33
Avg	0.0913	
247	0.0650	-1.01
--	Method 030.99	--
320	0.0150	.71
--	Method 030.XX	--
363	0.2300	2.10
409	0.1050	.58
096	0.0950	.26
193	0.1000	.22
Avg	0.0844	
247	0.0650	-.29
220	0.0650	-.35
320	0.0150	-.99
090	0.0000	-1.20
--	Method 040.10	--
405	10.820	.85
Avg	10.670	
090	10.520	-.88
--	Method 040.20	--
220	10.265	.84
Avg	10.218	
363	10.170	-.89
--	Method 040.40	--
193	10.550	1.03
394	10.525	.77
Avg	10.423	
096	10.355	-.57
409	10.260	-1.24
--	Method 040.99	--
247	10.420	.71
--	Method 040.XX	--
405	10.820	1.96
193	10.550	.65
090	10.520	.49
394	10.525	.47
Avg	10.432	
247	10.420	-.36
096	10.355	-.43
--	Method 040.XX	--
409	10.260	-.88
220	10.265	-.90
363	10.170	-1.37
--	Method 041.10	--
296	10.640	1.88
211	10.610	1.58
041	10.590	1.35
414	10.505 R	1.20
057	10.470	.53
009	10.510	.51
102	10.487	.43
040	10.490	.37
105	10.485	.36
055	10.485	.25
322	10.477	.17
177	10.473	.13
Avg	10.462	
233	10.455	-.09
029	10.450	-.16
131	10.445	-.18
028	10.410	-.58
049	10.360	-1.12
185	10.330	-1.40
137	10.330	-1.42
086	10.315 R	-1.74
326	10.275	-1.97
--	Method 041.20	--
055	10.685	1.34
106	10.555	.64
Avg	10.435	
397	10.426	-.33
362	10.300	-.84
415	10.210	-1.21
--	Method 041.30	--
260	10.385	.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. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 041.40 --	
131	10.450	.97
029	10.425	.83
025	10.355	.47
Avg	10.282	
027	10.147	-.78
034	10.035	-1.43
--	Method 041.50 --	
007	10.800 S	2.64
070	10.530	1.06
361	10.460	.59
325	10.405	.28
360	10.375	.10
023	10.365	.04
Avg	10.359	
393	10.020	-1.99
--	Method 041.60 --	
018	11.100 s	4.81
296	10.740	2.26
095	10.495	.58
397	10.477	.52
028	10.440	.25
177	10.456	.24
Avg	10.422	
073	10.410	-.16
043	10.400	-.26
037	10.410	-.30
288	10.345	-.55
262	10.255	-1.19
377	10.210	-1.66
351	9.5060 s	-6.50
--	Method 041.XX --	
018	11.100 s	4.77
007	10.800 s	2.76
296	10.740	2.24
055	10.685	1.86
--	Method 041.XX --	
296	10.640	1.54
211	10.610	1.34
041	10.590	1.19
414	10.505 R	.95
106	10.555	.95
070	10.530	.88
009	10.510	.63
095	10.495	.58
397	10.477	.52
102	10.487	.52
040	10.490	.51
057	10.470	.49
105	10.485	.49
055	10.485	.45
397	10.426	.43
322	10.477	.40
177	10.473	.37
361	10.460	.29
028	10.440	.25
177	10.456	.25
233	10.455	.25
131	10.450	.22
029	10.450	.22
131	10.445	.18
029	10.425	.05
Avg	10.420	
325	10.405	-.15
073	10.410	-.16
028	10.410	-.16
043	10.400	-.26
037	10.410	-.29
260	10.385	-.30
360	10.375	-.32
023	10.365	-.39
049	10.360	-.47
025	10.355	-.52
288	10.345	-.54
185	10.330	-.65
--	Method 041.XX --	
137	10.330	-.67
086	10.315	-.91
362	10.300 R	-1.02
326	10.275	-1.03
262	10.255	-1.18
415	10.210	-1.48
377	10.210 R	-1.64
027	10.147	-1.92
034	10.035	-2.71
393	10.020	-2.82
351	9.5060 s	-6.42
--	Method 048.20 --	
193	9.1000	1.33
247	9.0250	.81
Avg	8.9713	
362	8.9600	-.08
363	8.8000	-1.03
--	Method 048.99 --	
275	8.2300 X	-.71
--	Method 048.XX --	
193	9.1000	.97
247	9.0250	.69
362	8.9600	.39
Avg	8.8230	
363	8.8000	-.21
275	8.2300 X	-1.70
--	Method 050.00 --	
131	30.005 s	3.52
233	29.785	2.74
372	29.560	1.93
057	29.355	1.28
416	29.248	.82
102	29.195	.62
095	29.180	.60
--	Method 050.00 --	
258	29.120	.56
009	29.160	.51
391	29.160	.50
220	29.065	.28
392	29.097	.27
029	29.065	.25
148	29.030	.05
Avg	29.020	
257	29.005	-.06
350	28.970	-.21
211	28.955	-.24
073	28.900	-.44
055	28.965	-.52
049	28.895	-.56
028	28.865	-.63
414	28.860	-.64
043	28.800	-.80
090	28.780	-.88
326	28.725	-1.07
162	28.675	-1.23
296	28.595	-1.52
345	28.530	-1.76
193	27.200 s	-6.51
--	Method 050.10 --	
322	29.137	-.71
--	Method 050.30 --	
114	43.850 s	13.30
095	31.010 S	1.42
185	30.500	.92
262	30.100	.55
405	29.645	.14
Avg	29.603	
142	29.375	-.12
381	29.120	-.36
137	28.875	-.58
040	28.330 R	-1.17
--	Method 050.30 --	
397	27.375 S	-1.96
351	27.213 S	-2.10
--	Method 050.31 --	
086	31.455 S	.00
--	Method 050.50 --	
106	28.655	1.02
247	28.720	.62
Avg	28.527	
324	28.205	-1.04
--	Method 050.51 --	
070	29.960	1.77
023	29.420	.78
393	29.100	.16
Avg	29.035	
377	28.905	-.29
389	28.800	-.45
007	28.750	-.72
361	28.310	-1.38
--	Method 050.60 --	
390	30.695 S	2.93
131	30.040	1.60
030	29.600	.75
169	29.557	.64
415	29.428	.39
Avg	29.233	
200	29.005	-.45
288	28.990	-.48
055	28.860	-.73
356	28.385	-1.68
--	Method 050.61 --	
018	32.400 s	22.30
105	29.105	1.34
037	29.005	.91

* 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. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 050.61 --	
035	29.070	.86
028	28.970	.74
Avg	28.938	
025	28.885	-.45
034	28.920	-.53
029	28.845 X	-.64
041	28.705	-1.64
--	Method 050.99 --	
234	29.630 R	1.77
360	29.695	1.45
394	29.385	.91
325	29.275	.70
330	29.210	.69
260	29.050	.39
177	29.072	.37
Avg	28.878	
232	28.790	-.19
363	28.840	-.22
362	28.745	-.29
027	28.700	-.31
275	28.270 X	-1.09
369	27.505	-2.42
395	26.295 s	-4.55
--	Method 050.XX --	
114	43.850 s	36.75
018	32.400 s	8.26
086	31.455 s	5.93
095	31.010 s	4.88
390	30.695 s	4.09
185	30.500 A	3.56
262	30.100	2.56
131	30.040	2.43
131	30.005	2.33
070	29.960	2.23
234	29.630 R	2.17
233	29.785	1.79
360	29.695	1.58
405	29.645	1.44
030	29.600	1.35
372	29.560	1.23
169	29.557	1.23
023	29.420	.94
415	29.428	.91
394	29.385	.85
057	29.355	.79
142	29.375	.78
330	29.210	.63
325	29.275	.53
416	29.248	.46
258	29.120	.33
102	29.195	.33
105	29.105	.33
095	29.180	.32
322	29.137	.29
009	29.160	.25
391	29.160	.24
381	29.120	.22
177	29.072	.19
220	29.065	.16
393	29.100	.15
029	29.065	.14
392	29.097	.08
035	29.070	.05
Avg	29.062	
148	29.030	-.08
257	29.005	-.14
200	29.005	-.15
288	28.990	-.19
350	28.970	-.24
211	28.955	-.27
037	29.005	-.34
260	29.050	-.35
028	28.970	-.35
034	28.920	-.40
073	28.900	-.41
055	28.965	-.41
377	28.905	-.43
025	28.885	-.45
137	28.875	-.47
049	28.895	-.48
055	28.860	-.50
028	28.865	-.53
414	28.860	-.54
029	28.845 X	-.54
363	28.840	-.62
389	28.800	-.65
043	28.800	-.66
232	28.790	-.69
090	28.780	-.71
362	28.745	-.82
326	28.725	-.84
247	28.720	-.85
027	28.700	-.90
041	28.705	-.92
162	28.675	-.96
007	28.750	-.99
296	28.595	-1.15
106	28.655 R	-1.24
345	28.530	-1.32
356	28.385	-1.69
361	28.310	-1.86
275	28.270 X	-1.98
324	28.205	-2.13
040	28.330 R	-2.19
369	27.505 A	-3.85
397	27.375 s	-4.17
351	27.213 s	-4.57
193	27.200 s	-4.61
395	26.295 s	-6.84
--	Method 060.00 --	
193	0.9100	1.13
362	0.8450 R	.98
363	0.8650	.67
Avg	0.7999	
361	0.7350	-.67
416	0.6898	-1.15
--	Method 060.99 --	
320	0.8150	.71
--	Method 060.XX --	
193	0.9100	1.24
362	0.8450 R	1.10
363	0.8650	.72
320	0.8150	.15
Avg	0.8030	
361	0.7350	-.79
416	0.6898	-1.34
--	Method 101.30 --	
131	0.8670	1.26
102	0.8293	.69
Avg	0.7856	
247	0.7765	-.20
009	0.7602	-.43
035	0.6950	-1.49
--	Method 121.00 --	
193	0.2520	.71
--	Method 121.30 --	
131	0.4370	1.23
102	0.4247	.75
Avg	0.4062	
035	0.4030	-.80
009	0.3863	-.83
247	0.3800	-1.04
--	Method 121.XX --	
131	0.4370	.88
102	0.4247	.69
035	0.4030	.47
009	0.3863	.13
Avg	0.3805	
247	0.3800	-.01
193	0.2520	-2.00
--	Method 131.00 --	
193	0.1640	.71
--	Method 131.99 --	
040	4.2300	-.71
--	Method 131.XX --	
040	4.2300	.87
Avg	2.1970	
193	0.1640	-.87
--	Method 144.01 --	
070	5.0850 s	3.74
095	4.9600	1.24
296	4.9750	1.19
055	5.0000	1.10
157	4.9890	.95
351	4.9815	.85
043	4.9650	.68
193	4.9200	.38
233	4.9250	.35
324	4.9250	.25
Avg	4.9113	
288	4.8900	-.26
405	4.8750	-.53
057	4.8750	-.61
102	4.8287	-1.01
137	4.8350	-1.02
363	4.8650 R	-1.39
395	4.7250	-2.26

* 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. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 144.01 --	
262	3.9650 s	-11.49
--	Method 144.02 --	
086	4.7750	-.71
--	Method 144.03 --	
Avg	4.7100	
361	4.7100	-.71
372	3.0150 S	-59.93
--	Method 144.50 --	
200	4.8850 X	.71
--	Method 144.99 --	
409	12.570 s	37.55
330	5.0650	1.39
389	5.0500	1.26
393	5.0150	1.08
023	4.9395	.75
220	4.9200	.64
394	4.9200	.61
029	4.9000	.52
247	4.8800	.42
009	4.8351	.22
177	4.8375	.22
Avg	4.7933	
136	4.7850	-.08
028	4.7750	-.11
040	4.7500	-.21
300	4.7300	-.34
397	4.5508	-1.21
360	4.5350	-1.33
232	4.4315	-1.77
037	4.3600	-2.09
131	4.0850 S	-3.42
035	3.8950 S	-4.37

Lab	Average*	Index
--	Method 144.XX --	
409	12.570 s	46.60
070	5.0850 R	2.12
330	5.0650	1.46
389	5.0500	1.29
393	5.0150	1.06
055	5.0000	.96
296	4.9750	.92
095	4.9600	.89
157	4.9890	.88
351	4.9815	.84
043	4.9650	.74
023	4.9395	.66
363	4.8650	.65
220	4.9200	.52
233	4.9250	.52
324	4.9250	.50
193	4.9200	.50
394	4.9200	.47
200	4.8850 X	.47
029	4.9000	.34
057	4.8750	.29
288	4.8900	.28
405	4.8750	.25
247	4.8800	.22
Avg	4.8428	
177	4.8375	-.06
102	4.8287	-.11
009	4.8351	-.13
137	4.8350	-.22
136	4.7850	-.36
086	4.7750	-.42
028	4.7750	-.42
040	4.7500	-.56
300	4.7300	-.70
395	4.7250	-.71
361	4.7100	-.81
397	4.5508	-1.80
360	4.5350	-1.94

Lab	Average*	Index
--	Method 144.XX --	
232	4.4315	-2.50
037	4.3600	-2.91
131	4.0850 s	-4.57
262	3.9650 s	-5.29
035	3.8950 s	-5.75
372	3.0150 s	-11.02
--	Method 151.30 --	
102	3.7395	.90
Avg	3.1448	
247	2.5500	-.83
--	Method 151.99 --	
409	5.0500	1.26
Avg	4.2517	
220	3.9000	-.64
040	3.8050	-.71
--	Method 151.XX --	
409	5.0500	1.46
220	3.9000	.26
Avg	3.8089	
040	3.8050	-.05
102	3.7395	-.31
247	2.5500	-1.48
--	Method 165.00 --	
258	0.0585	1.64
040	0.0545 R	1.26
397	0.0548	.73
028	0.0540	.58
257	0.0540	.58
029	0.0530	.29
Avg	0.0518	
392	0.0500	-.43
220	0.0495	-.56
037	0.0495	-.65
391	0.0510	-.74

Lab	Average*	Index
--	Method 165.00 --	
023	0.0435	-2.01
055	0.0310 s	-4.99
--	Method 165.70 --	
043	0.0475	.71
--	Method 165.99 --	
300	0.0600	1.47
389	0.0600	1.47
360	0.0580	1.16
106	0.0550	.57
409	0.0535	.38
393	0.0530	.16
Avg	0.0521	
394	0.0511	-.20
009	0.0498	-.47
057	0.0490	-.62
324	0.0461	-1.13
232	0.0455	-1.24
035	0.0448	-1.38
--	Method 165.XX --	
300	0.0600	1.70
389	0.0600	1.70
258	0.0585	1.43
360	0.0580	1.35
040	0.0545 R	1.09
106	0.0550	.70
397	0.0548	.63
257	0.0540	.50
028	0.0540	.50
409	0.0535	.47
393	0.0530	.25
029	0.0530	.25
Avg	0.0518	
394	0.0511	-.14
392	0.0500	-.37
009	0.0498	-.46

Lab	Average*	Index
--	Method 165.XX --	
220	0.0495	-.48
057	0.0490	-.61
391	0.0510	-.64
043	0.0475	-1.03
324	0.0461	-1.18
232	0.0455	-1.31
035	0.0448	-1.46
023	0.0435	-1.75
055	0.0310 s	-4.33
--	Method 171.10 --	
137	0.0700	.00
--	Method 181.00 --	
193	4.1500	1.40
300	3.8000	.40
394	3.7300	.34
Avg	3.6538	
220	3.4500	-.57
397	3.1388	-1.39
--	Method 181.30 --	
324	111.50 s	194.03
096	4.5000 R	2.25
320	4.0000	1.17
035	3.6150	.74
102	3.6988	.64
157	3.7000	.63
106	3.6500	.55
232	3.3500	.09
Avg	3.3488	
389	3.0000	-.63
009	2.9750	-.67
247	2.1500	-2.15
--	Method 181.99 --	
409	4.1500	-.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. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 181.XX --	
324	111.50 s	201.14
096	4.5000 R	2.09
193	4.1500	1.25
409	4.1500	1.22
320	4.0000	.94
035	3.6150 R	.63
300	3.8000	.57
394	3.7300	.47
102	3.6988	.39
157	3.7000	.38
106	3.6500	.30
Avg	3.4959	
220	3.4500	-.13
232	3.3500	-.29
397	3.1388	-.67
389	3.0000	-.92
009	2.9750	-.97
247	2.1500	-2.51
--	Method 190.00 --	
027	22.328	.71
--	Method 190.99 --	
009	22.558	-.71
--	Method 190.XX --	
009	22.558	.87
Avg	22.443	
027	22.328	-.87
--	Method 191.00 --	
193	109.50	1.05
Avg	100.50	
220	91.500	-.62
--	Method 191.30 --	
009	92.415	1.19
102	80.515	.47
--	Method 191.30 --	
Avg	73.870	
247	69.500	-.28
035	53.050	-1.34
--	Method 191.XX --	
193	109.50 R	2.20
009	92.415	.96
220	91.500	.91
102	80.515	.28
Avg	77.396	
247	69.500	-.51
035	53.050	-1.56
--	Method 202.00 --	
193	56.500	1.26
Avg	42.217	
397	37.150	-.45
220	33.000	-.83
--	Method 202.30 --	
009	62.785	1.27
096	59.500	1.03
106	56.000	.74
102	52.512	.51
Avg	46.662	
389	46.000	-.05
324	33.750	-1.02
040	32.400	-1.15
247	30.350	-1.28
--	Method 202.99 --	
409	63.000	1.24
Avg	29.917	
320	21.500	-.32
232	5.2500	-.93
--	Method 202.XX --	
409	63.000	1.23
--	Method 202.XX --	
009	62.785	1.21
096	59.500	1.03
193	56.500	.84
106	56.000	.81
102	52.512	.63
389	46.000	.23
Avg	42.121	
397	37.150	-.30
324	33.750	-.50
220	33.000	-.55
040	32.400	-.60
247	30.350	-.69
320	21.500	-1.21
232	5.2500	-2.16
--	Method 221.00 --	
086	0.0077 s	6.19
193	0.0049	1.19
028	0.0043	.32
Avg	0.0041	
029	0.0039	-.43
390	0.0035	-1.35
--	Method 221.30 --	
096	42.500 s	4614.21
057	0.0060	1.69
247	0.0057	1.24
040	0.0055	1.10
389	0.0052	.65
009	0.0049	.32
106	0.0047	.26
Avg	0.0047	
102	0.0046	-.17
300	0.0044	-.38
035	0.0041	-.78
324	0.0040	-.98
157	0.0039	-1.09
393	0.0035	-1.54
--	Method 221.99 --	
409	0.0049	.90
220	0.0047	.54
Avg	0.0046	
232	0.0042	-1.18
--	Method 221.XX --	
096	42.500 s	2831.61
086	0.0077 s	4.83
057	0.0060	2.07
247	0.0057	1.54
040	0.0055	1.39
389	0.0052	.86
009	0.0049	.46
193	0.0049	.35
409	0.0049	.35
106	0.0047	.32
220	0.0047	.23
Avg	0.0046	
102	0.0046	-.09
300	0.0044	-.32
028	0.0043	-.49
232	0.0042	-.65
035	0.0041	-.78
324	0.0040	-1.01
029	0.0039	-1.07
157	0.0039	-1.13
393	0.0035	-1.65
390	0.0035 R	-1.81
--	Method 241.00 --	
086	0.6707	1.55
137	0.6500	1.23
136	0.6435	1.13
037	0.6360	1.02
095	0.6225	.80
055	0.6100	.63
233	0.6100	.61
029	0.5925 X	.34
--	Method 241.00 --	
220	0.5850	.24
397	0.5835	.20
Avg	0.5706	
351	0.5645	-.09
043	0.5700	-.15
296	0.5645	-.19
395	0.5700	-.31
028	0.5500	-.35
390	0.5395	-.49
262	0.5350	-.56
177	0.5330	-.58
369	0.5050	-1.02
040	0.4325	-2.14
114	0.3650 S	-3.20
405	0.2100 s	-5.58
--	Method 241.30 --	
330	0.6250	1.30
131	0.6085	.99
394	0.6000	.85
009	0.5957	.79
409	0.5900	.67
057	0.5875	.65
360	0.5645	.34
102	0.5656	.29
157	0.5674	.28
324	0.5650	.25
106	0.5600	.23
096	0.5600	.15
Avg	0.5513	
232	0.5242	-.48
023	0.5030	-.85
035	0.4985 R	-1.01
247	0.4900	-1.06
389	0.4650	-1.49
300	0.4000	-2.62

* 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. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 241.99 --	
234	0.5700	.62
Avg	0.5520	
320	0.5341	-1.05
--	Method 241.XX --	
086	0.6707	1.80
137	0.6500	1.45
136	0.6435	1.35
037	0.6360	1.24
330	0.6250	1.08
095	0.6225	1.01
055	0.6100	.82
233	0.6100	.80
131	0.6085	.78
394	0.6000	.65
009	0.5957	.60
029	0.5925 X	.52
409	0.5900	.48
057	0.5875	.47
220	0.5850	.41
397	0.5835	.37
234	0.5700	.36
395	0.5700	.36
360	0.5645	.24
043	0.5700	.22
296	0.5645	.18
102	0.5656	.16
157	0.5674	.11
324	0.5650	.11
351	0.5645	.06
Avg	0.5606	
096	0.5600	-.01
106	0.5600	-.16
028	0.5500	-.23
390	0.5395	-.36
262	0.5350	-.42
177	0.5330	-.45
232	0.5242	-.60

Lab	Average*	Index
--	Method 241.XX --	
320	0.5341 R	-.80
369	0.5050	-.91
023	0.5030	-.94
035	0.4985	-1.09
247	0.4900	-1.15
389	0.4650	-1.56
040	0.4325	-2.09
193	0.4150	-2.38
300	0.4000	-2.62
114	0.3650 s	-3.21
405	0.2100 s	-5.70
--	Method 251.00 --	
397	9.5720	.94
220	7.7500	.44
Avg	7.1073	
193	4.0000	-1.19
--	Method 251.30 --	
096	14.500 S	2.28
324	13.750	1.71
247	11.500	.93
Avg	8.8512	
232	7.1500	-.58
102	7.1073	-.60
106	6.8500	-.71
157	6.7500	-.72
--	Method 251.99 --	
409	9.5000	.89
Avg	8.8400	
040	8.1800	-.84
--	Method 251.XX --	
096	14.500 s	2.70
324	13.750	2.08
247	11.500	1.21
409	9.5000	.47

Lab	Average*	Index
--	Method 251.XX --	
397	9.5720	.46
Avg	8.3736	
040	8.1800	-.18
220	7.7500	-.44
232	7.1500	-.47
102	7.1073	-.49
106	6.8500	-.62
157	6.7500	-.62
193	4.0000	-1.67
--	Method 261.00 --	
086	0.6707 s	26.06
043	0.2300	1.46
037	0.2220	1.02
392	0.2220	1.02
351	0.2175	.77
055	0.2150	.69
262	0.2150	.69
397	0.2144	.65
136	0.2105	.38
369	0.2100	.35
Avg	0.2038	
177	0.1990	-.27
257	0.1960	-.43
028	0.1965	-.45
193	0.1970	-.50
220	0.1950	-.56
390	0.1845	-1.08
258	0.1800	-1.33
391	0.1595	-2.47
405	0.0750 s	-7.19
--	Method 261.11 --	
029	0.2450 X	1.41
296	0.2100	.25
Avg	0.2071	
040	0.1925	-.69
095	0.1810	-.98

Lab	Average*	Index
--	Method 261.30 --	
330	0.2450	2.49
009	0.2238	.90
023	0.2200	.62
102	0.2177	.61
035	0.2130	.53
157	0.2141	.18
Avg	0.2118	
247	0.2095	-.31
057	0.2081	-.37
360	0.2060	-.57
131	0.2008	-.81
389	0.2000	-.87
300	0.2000	-.87
106	0.1950	-1.30
--	Method 261.31 --	
324	0.2350	.71
--	Method 261.99 --	
234	0.2100	.92
409	0.2150	.86
394	0.2070	.18
Avg	0.2064	
232	0.1944	-1.05
320	0.2056	-1.33
--	Method 261.XX --	
086	0.6707 s	27.16
330	0.2450	2.24
029	0.2450 X	2.22
324	0.2350 R	1.85
043	0.2300	1.34
009	0.2238	.98
037	0.2220	.87
392	0.2220	.87
023	0.2200	.76
102	0.2177	.70
351	0.2175	.61

Lab	Average*	Index
--	Method 261.XX --	
234	0.2100	.61
055	0.2150	.55
262	0.2150	.55
409	0.2150	.55
035	0.2130	.53
397	0.2144	.51
157	0.2141	.41
296	0.2100	.39
247	0.2095	.25
057	0.2081	.20
136	0.2105	.20
369	0.2100	.17
Avg	0.2072	
394	0.2070	-.12
360	0.2060	-.30
131	0.2008	-.37
389	0.2000	-.42
300	0.2000	-.42
177	0.1990	-.48
257	0.1960	-.65
028	0.1965	-.66
193	0.1970	-.69
232	0.1944	-.75
106	0.1950	-.77
220	0.1950	-.77
320	0.2056 R	-.90
040	0.1925	-1.09
390	0.1845	-1.33
095	0.1810	-1.54
258	0.1800	-1.59
391	0.1595	-2.79
405	0.0750 s	-7.75
--	Method 271.00 --	
137	0.2500	1.29
Avg	0.0913	
193	0.0275 R	-.52
029	0.0140	-.63

* 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. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index
--	Method 271.00 --	
405	0.0100	-.66
--	Method 271.30 --	
157	0.0950	-.71
--	Method 271.99 --	
234	0.1300	.91
Avg	0.0875	
220	0.0450	-.82
--	Method 271.XX --	
137	0.2500	2.01
234	0.1300 R	.68
157	0.0950	.25
Avg	0.0736	
220	0.0450	-.33
193	0.0275	-.53
029	0.0140	-.68
405	0.0100	-.73
--	Method 281.99 --	
296	0.0351	.65
Avg	0.0336	
040	0.0320	-1.04
--	Method 289.00 --	
220	5.8500	.71
--	Method 289.30 --	
009	13.590 s	10.57
057	7.5000	1.56
389	7.4500	1.32
096	7.0000	.63
102	6.7783	.39
Avg	6.5720	
232	6.4500	-.20
247	6.1500	-.63
324	6.1500	-.73
--	Method 289.30 --	
157	5.8200	-1.11
106	5.8500	-1.26
--	Method 289.99 --	
409	8.0000	.85
Avg	5.9000	
040	3.8000	-.88
--	Method 289.XX --	
009	13.590 s	6.55
409	8.0000	1.43
057	7.5000	1.08
389	7.4500	.95
096	7.0000	.54
102	6.7783	.37
232	6.4500	.06
Avg	6.3999	
247	6.1500	-.23
324	6.1500	-.32
157	5.8200	-.52
106	5.8500	-.64
220	5.8500	-.70
040	3.8000	-2.37
--	Method 291.00 --	
397	38.736	1.12
Avg	37.245	
193	37.000	-.71
220	36.000	-.86
--	Method 291.30 --	
320	38.500 R	.93
096	39.000	.84
040	38.200	.68
102	37.662	.54
009	37.180	.41
247	36.650	.29
Avg	35.422	
--	Method 291.30 --	
232	32.700	-.67
157	26.565	-2.08
324	4.2000 s	-7.33
--	Method 291.99 --	
409	42.500	.87
Avg	32.075	
035	21.650	-.87
--	Method 291.XX --	
409	42.500	1.26
320	38.500 R	.71
096	39.000	.65
397	38.736	.61
040	38.200	.52
102	37.662	.42
193	37.000	.34
009	37.180	.33
247	36.650	.23
220	36.000	.12
Avg	35.320	
232	32.700	-.49
157	26.565	-1.54
035	21.650	-2.40
324	4.2000 s	-5.46
--	Method 301.99 --	
040	0.0850	.71
--	Method 311.00 --	
193	0.5625	.71
--	Method 311.99 --	
102	0.6688	1.12
247	0.6250	.30
009	0.6129	.11
Avg	0.6098	
035	0.5325	-1.46
--	Method 311.XX --	
102	0.6688	1.35
247	0.6250	.50
009	0.6129	.26
Avg	0.6003	
193	0.5625	-.75
035	0.5325	-1.34
--	Method 321.00 --	
193	0.1750	1.99
258	0.1650 R	1.73
137	0.1700	1.46
043	0.1650	1.10
177	0.1625	.76
037	0.1610	.61
397	0.1605	.57
369	0.1600	.52
055	0.1600	.52
220	0.1550	.48
029	0.1585	.38
028	0.1575	.31
351	0.1565	.23
Avg	0.1545	
095	0.1535	-.11
136	0.1530	-.15
296	0.1545	-.33
233	0.1500	-.43
257	0.1485	-.57
391	0.1450	-.90
390	0.1440	-1.04
392	0.1405	-1.34
086	0.1393	-1.46
114	0.1400 R	-1.67
395	0.1300	-2.32
200	0.1050 s	-4.71
--	Method 321.30 --	
409	1.5750 s	171.84
102	0.1761	1.85
--	Method 321.30 --	
009	0.1721	1.46
389	0.1700	1.12
324	0.1650 R	.79
023	0.1660	.68
247	0.1615	.20
Avg	0.1608	
057	0.1608	-.06
360	0.1595	-.17
394	0.1580	-.36
131	0.1565	-.55
040	0.1560	-.76
035	0.1540	-.84
106	0.1500	-1.31
300	0.1500	-1.31
157	0.1000 s	-7.39
330	0.0062 s	-18.78
--	Method 321.99 --	
320	0.1589	1.12
Avg	0.1524	
220	0.1520	-.19
232	0.1464	-1.10
--	Method 321.XX --	
409	1.5750 s	142.70
102	0.1761	1.94
193	0.1750	1.91
258	0.1650 R	1.72
009	0.1721	1.60
389	0.1700	1.33
137	0.1700	1.33
043	0.1650	.97
324	0.1650	.97
023	0.1660	.95
177	0.1625	.58
247	0.1615	.50
037	0.1610	.43
057	0.1608	.41

* 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. - 200204 Grade 5-10-30

Laboratory Averages & Accuracy Indexes

Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index	Lab	Average*	Index
--	Method 321.XX --													
397	0.1605	.39												
369	0.1600	.33												
055	0.1600	.33												
360	0.1595	.28												
320	0.1589	.24												
029	0.1585	.19												
028	0.1575	.17												
394	0.1580	.16												
Avg	0.1567													
351	0.1565	-.15												
131	0.1565	-.15												
035	0.1540	-.29												
095	0.1535	-.33												
136	0.1530	-.38												
040	0.1560	-.41												
296	0.1545	-.42												
220	0.1520	-.49												
220	0.1550	-.53												
106	0.1500	-.68												
300	0.1500	-.68												
233	0.1500	-.68												
257	0.1485	-.83												
232	0.1464	-1.06												
391	0.1450	-1.18												
390	0.1440	-1.32												
392	0.1405	-1.64												
086	0.1393	-1.77												
114	0.1400 R	-1.96												
395	0.1300	-2.69												
200	0.1050 s	-5.23												
157	0.1000 s	-5.71												
330	0.0062 s	-15.14												

* 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. - 200204 Grade 5-10-30

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
001.99	3	0.0000	1.03	0.36	060.XX	6	0.0810	0.96	0.42
001.XX	3	0.0000	1.03	0.36	101.30	5	0.0000	1.02	0.27
009.10	8	0.0000	0.91	0.47	101.XX	5	0.0000	1.02	0.27
009.XX	8	0.0000	0.91	0.47	121.30	5	0.0000	0.97	0.39
010.11	13	-0.5811	3.48	2.12	121.XX	6	0.0000	1.04	0.14
010.12	8	0.0000	1.02	0.17	131.XX	2	0.0000	1.22	0.02
010.60	50	-0.0843	1.11	0.65	144.01	18	-0.5521	2.90	0.89
010.99	3	0.0000	0.95	0.48	144.03	2	-29.9636	42.38	0.52
010.XX	70	-0.1154	1.17	0.65	144.99	21	1.4186	8.41	0.27
020.10	9	-0.0756	0.90	0.81	144.XX	43	0.4989	7.56	0.38
020.20	19	0.0000	0.98	0.27	151.30	2	0.0000	1.17	0.26
020.40	8	0.8922	2.67	0.41	151.99	3	0.0000	1.09	0.19
020.50	4	2.5188	3.75	0.15	151.XX	5	0.0000	1.04	0.18
020.99	3	0.0000	1.09	0.21	165.00	12	-0.3596	1.71	0.45
020.XX	43	0.5208	2.34	0.44	165.99	12	0.0000	1.01	0.17
030.20	2	0.0000	1.20	0.18	165.XX	25	-0.1499	1.28	0.32
030.40	4	0.0000	0.68	0.73	181.00	5	0.0000	1.03	0.23
030.XX	8	0.0000	1.00	0.23	181.30	11	17.8265	58.45	0.42
040.10	2	0.0000	1.20	0.16	181.XX	17	11.9546	48.76	0.36
040.20	2	0.0000	0.70	0.71	190.XX	2	0.0000	1.22	0.04
040.40	4	0.0000	1.04	0.26	191.00	2	0.0000	0.87	0.61
040.XX	9	0.0000	1.00	0.24	191.30	4	0.0000	1.07	0.11
041.10	21	-0.0519	1.00	0.36	191.XX	6	0.3417	1.26	0.34
041.20	5	0.0000	1.03	0.24	202.00	3	0.0000	1.11	0.11
041.40	5	0.0000	1.06	0.10	202.30	8	0.0000	1.02	0.14
041.50	7	0.3673	1.35	0.27	202.99	3	0.0000	1.12	0.03
041.60	13	-0.1294	2.50	0.27	202.XX	14	0.0000	1.01	0.09
041.XX	45	-0.1028	1.59	0.30	221.00	5	1.1981	2.80	0.80
048.20	4	0.0000	0.71	0.70	221.30	13	4198.478	15137.83	534.34
048.XX	5	0.0000	0.99	0.33	221.99	3	0.0000	1.06	0.29
050.00	29	-0.1028	1.69	0.22	221.XX	21	2990.261	13702.42	483.67
050.30	11	0.9114	4.22	0.50	241.00	23	-0.3807	1.62	0.15
050.50	3	0.0000	0.89	0.56	241.30	18	-0.0507	1.00	0.17
050.51	7	0.0000	1.01	0.22	241.99	2	0.0000	0.59	0.76
050.60	9	0.3198	1.36	0.23	241.XX	43	-0.2165	1.37	0.19
050.61	9	2.4739	7.46	0.69	251.00	3	0.0000	1.09	0.21
050.99	14	-0.2301	1.59	0.36	251.30	7	0.2771	1.20	0.48
050.XX	79	0.4267	4.59	0.63	251.99	2	0.0000	1.00	0.50
060.00	5	0.0922	0.95	0.41	251.XX	12	0.1955	1.17	0.43

MAGRUDER - Fertilizer Check Sample No. - 200204 Grade 5-10-30

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
261.00	19	0.9932	6.36	0.21					
261.11	4	0.0000	1.04	0.25					
261.30	13	0.0000	0.98	0.28					
261.99	5	0.0000	0.66	0.74					
261.XX	42	0.4989	4.49	0.31					
271.00	4	-0.1298	0.95	0.03					
271.99	2	0.0000	1.16	0.28					
271.XX	7	0.0920	0.99	0.09					
281.99	2	0.0000	0.90	0.59					
281.XX	2	0.0000	0.90	0.59					
289.30	10	1.0381	3.40	0.72					
289.99	2	0.0000	1.21	0.14					
289.XX	13	0.4955	2.02	0.42					
291.00	3	0.0000	0.95	0.48					
291.30	9	-0.7345	2.64	0.22					
291.99	2	0.0000	1.22	0.06					
291.XX	14	-0.3501	1.75	0.15					
311.99	4	0.0000	1.07	0.10					
311.XX	5	0.0000	1.05	0.10					
321.00	25	-0.2029	1.36	0.41					
321.30	17	8.5972	42.34	0.78					
321.99	3	0.0000	1.07	0.26					
321.XX	43	-0.6181	2.73	0.35					