

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

# Methods: 118

Sample # 150711

Statistical Summary

# Labs Reporting: 88

Grade 3-8-8

Issue Date : 08/31/2015

Method Code	Analyte & Method	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
001.99	Ammoniacal Nitrogen, Other (%)	2	1	0.2300									
003.99	Water Insoluble Nitrogen, Other (%)	1		3.995									
010.11	Total Nitrogen, Modified Comprehensive (3%)	9	9	4.007	0.4193	4.238	0.4960	0.0762	0.0180	1.80%	5.85%	0.0378	3.22%
010.12	Total Nitrogen, Salicylic (3%)	3	3	4.445	0.3627	4.445	0.4960	0.3627	0.1481	8.16%	5.58%	0.0567	3.20%
010.60	Total Nitrogen, Combustion (3%)	60	57	4.218	0.5494	4.315	0.4960	0.0898	0.0084	2.08%	5.75%	0.0524	3.21%
010.99	Total Nitrogen, Other (3%)	3	3	4.308	0.2323	4.308	0.4960	0.2323	0.0948	5.39%	5.76%	0.1033	3.21%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ... (%)	7	6	11.83	1.273	12.30		0.1535	0.0443	1.25%		0.0483	2.74%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	17	17	11.91	0.9623	12.13		0.3206	0.0550	2.64%		0.1276	2.75%
020.40	Total Phosphorus as P2O5, Automated (%)	5	5	12.38	0.4889	12.38		0.4889	0.1546	3.95%		0.0700	2.74%
020.50	Total Phosphorus as P2O5, ICP (%)	15	15	12.14	0.9770	12.19		0.9721	0.1775	7.97%		0.2242	2.75%
020.99	Total Phosphorus as P2O5, Other (%)	2	2	11.46	0.9793								
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t... (%)	1		2.360									
040.20	Indirect Available Phosphorus as P2O5, Spectrophot... (8%)	2	2	9.200	4.243								
040.40	Indirect Available Phosphorus as P2O5, Automated (8%)	1		9.680									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q... (8%)	5	5	11.41	0.8802	11.41	0.6900	0.8802	0.2783	7.72%	3.02%	0.1093	2.77%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q... (8%)	5	5	11.09	0.3057	11.09	0.6900	0.3057	0.0967	2.76%	3.11%	0.1420	2.78%
041.20	Direct Available Phosphorus as P2O5, Spectrophotom... (8%)	1		7.200									
041.21	Direct Available Phosphorus as P2O5, Spectrophotom... (8%)	4	4	9.744	1.602	9.744	0.6900	1.602	0.5665	16.45%	3.54%	0.0625	2.84%
041.40	Direct Available Phosphorus as P2O5, Automated (8%)	2	2	8.533	4.267								
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	7	7	9.177	2.162	9.412	0.6900	1.293	0.3455	13.73%	3.67%	0.0479	2.85%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (8%)	6	6	11.03	1.727	11.25	0.6900	1.455	0.4201	12.93%	3.07%	0.1517	2.78%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ... (8%)	12	12	10.58	0.7289	10.57	0.6900	0.8228	0.1680	7.78%	3.26%	0.1279	2.80%
041.99	Direct Available Phosphorus as P2O5, Other (8%)	2	2	11.53	3.914								
048.20	Water Soluble Phosphorus as P2O5, Spectrophotometr... (%)	2	2	0.5500	0.6364								
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		0.1400									
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	14	13	8.718	3.700	7.819	0.6162	0.7334	0.1438	9.38%	3.94%	0.1192	2.94%
050.10	Soluble Potassium as K2O, STPB Citrate (8%)	1		4.945									
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	6	6	8.807	0.8969	8.585	0.6162	0.4971	0.1435	5.79%	3.59%	0.2038	2.89%
050.31	Soluble Potassium as K2O, AA (Citrate) (8%)	1		7.915									
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (8%)	1		8.515									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	8	8	8.539	0.8301	8.331	0.6162	0.3744	0.0936	4.49%	3.70%	0.1868	2.91%

Method Code	Analyte & Method	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	7	7	8.959	1.367	8.571	0.6162	0.2460	0.0658	2.87%	3.59%	0.0771	2.89%
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	10	10	8.352	0.4454	8.323	0.6162	0.4419	0.0988	5.31%	3.70%	0.0942	2.91%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala... (8%)	4	4	9.323	1.968	9.323	0.6162	1.968	0.6958	21.11%	3.30%	0.3850	2.86%
050.61	Soluble Potassium as K2O, Flame Photometric (Citra... (8%)	4	4	8.233	0.2007	8.233	0.6162	0.2007	0.0709	2.44%	3.74%	0.0438	2.91%
050.62	Soluble Potassium as K2O, Flame Photometric (Citra... (8%)	5	5	8.419	0.1823	8.419	0.6162	0.1823	0.0576	2.17%	3.66%	0.2580	2.90%
050.99	Soluble Potassium as K2O, Other (8%)	24	24	8.270	1.337	8.451	0.6162	0.5841	0.0843	6.91%	3.65%	0.1222	2.90%
060.00	Water (Free), Vacuum Oven (%)	3	3	3.282	0.2337	3.282		0.2337	0.0954	7.12%		0.0833	3.34%
060.99	Water (Free), Other (%)	1		5.020									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	11	11	11.85	0.6080	11.73		0.4647	0.0991	3.96%		0.2499	2.76%
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (%)	2	2	11.54	0.2949								
101.99	Acid Soluble Calcium, Other (%)	2	2	11.43	0.4526								
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	10	10	3.797	0.7327	3.685	0.3869	0.2302	0.0515	6.25%	5.25%	0.1293	3.29%
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2... (3%)	1		3.660									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (3%)	28	26	3.811	0.2550	3.797	0.3869	0.2030	0.0282	5.35%	5.09%	0.0650	3.27%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A... (3%)	1		3.330									
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (3%)	7	6	3.637	0.2168	3.646	0.3869	0.2294	0.0662	6.29%	5.31%	0.0783	3.29%
121.99	Acid Soluble Magnesium, Other (3%)	6	6	3.906	0.6020	3.734	0.3869	0.2564	0.0740	6.87%	5.18%	0.0617	3.28%
131.00	Water Soluble Magnesium, AA (%)	5	5	3.293	0.5778	3.293		0.5778	0.1827	17.54%		0.1332	3.34%
131.30	Water Soluble Magnesium, ICP (%)	11	11	3.387	0.2168	3.399		0.1583	0.0337	4.66%		0.1034	3.33%
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	1		4.030									
143.99	Elemental Sulfur, Other (%)	3	3	7.927	0.4352	7.927		0.4352	0.1777	5.49%		0.0933	2.93%
148.00	Total Sulfur, Combustion (%)	2	2	9.585	2.461								
148.01	Total Sulfur, Gravimetric - sulfate and elemental (%)	2	2	7.205	0.7142								
148.07	Total Sulfur, ICP, test portion as in 2006.03 modi... (%)	6	6	7.973	0.6070	7.983		0.6689	0.1931	8.38%		0.2265	2.93%
148.99	Total Sulfur, Other (%)	5	5	8.103	0.5106	8.103		0.5106	0.1615	6.30%		0.1392	2.92%
151.00	Acid Soluble Arsenic , AA, test portion as in 200... (ppm)	1		0.1650									
151.30	Acid Soluble Arsenic , ICP (ppm)	3	2	0.6100	0.6788	0.6100		0.6788	0.3394	111.28%		0.0300	17.23%
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified w/9:... (ppm)	1		0.6762									
151.99	Acid Soluble Arsenic , Other (ppm)	2	2	0.2777	0.0109								
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (%)	2	2	0.0032	0.0026								
165.99	Acid Soluble Boron , Other (%)	1		0.0024									
171.10	Water Soluble Boron , Spectrophotometric (%)	1		0.0151									
181.30	Acid Soluble Cadmium , ICP (ppm)	4	2	0.0788	0.0371	0.0788		0.0371	0.0186	47.14%		0.0055	23.45%
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9:... (ppm)	2	2	0.9792	1.337								
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	1		0.0000									
190.00	Water Soluble Chlorine, Titrimetric (%)	1		0.4850									
191.30	Acid Soluble Chromium , ICP (ppm)	9	9	93.84	19.83	97.47		12.96	3.054	13.29%		2.962	8.03%
191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9... (ppm)	4	4	114.0	6.915	114.0		6.915	2.445	6.07%		1.555	7.84%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	1		98.46									
191.99	Acid Soluble Chromium , Other (ppm)	4	4	94.20	33.79	94.20		33.79	11.95	35.88%		9.750	8.07%
202.30	Acid Soluble Cobalt , ICP (ppm)	7	7	2.184	0.3801	2.218		0.3483	0.0931	15.70%		0.0614	14.19%
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3... (ppm)	3	3	2.142	0.7466	2.142		0.7466	0.3048	34.86%		0.1499	14.26%

Method Code	Analyte & Method	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	1		1.510									
202.99	Acid Soluble Cobalt , Other (ppm)	3	3	6.100	3.901	6.100		3.901	1.593	63.95%		5.667	12.19%
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	2	2	0.0008	0.0001								
221.30	Acid Soluble Copper , ICP, test portion inorganic... (%)	10	8	0.0014	0.0013	0.0010		0.0007	0.0002	70.91%		0.0004	11.26%
221.31	Acid Soluble Copper , ICP, test portion organic 9... (%)	1		0.8450									
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-... (%)	1		5.915									
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-... (%)	3	2	0.0007	0.0003	0.0007		0.0002	0.0001	36.66%		0.0001	12.00%
221.99	Acid Soluble Copper , Other (%)	5	5	0.0008	0.0005	0.0008		0.0005	0.0001	59.55%		0.0003	11.74%
241.00	Acid Soluble Iron , AA, inorganic 965.09 (%)	2	2	0.0823	0.0053								
241.30	Acid Soluble Iron , ICP, test portion inorganic 96... (%)	10	10	0.0658	0.0114	0.0669		0.0101	0.0023	15.15%		0.0026	6.01%
241.31	Acid Soluble Iron , ICP, test portion organic 965.... (%)	1		0.4250									
241.33	Acid Soluble Iron , ICP, test portion 2006.03A-C, ... (%)	2	2	0.0717	0.0036								
241.99	Acid Soluble Iron , Other (%)	2	2	0.0435	0.0247								
251.30	Acid Soluble Lead , ICP (ppm)	2	1	0.1745									
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 H... (ppm)	2	2	0.3598	0.1467								
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	1		0.2133									
251.99	Acid Soluble Lead , Other (ppm)	1		54.80									
261.00	Acid Soluble Manganese , AA, Mn2+ only (%)	1		0.0031									
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	1		0.0033									
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (%)	5	5	0.0028	0.0002	0.0028		0.0002	0.0001	7.03%		0.0000	9.69%
261.35	Acid Soluble Manganese , ICP, test portion 2006.0... (%)	2	2	0.0029	0.0004								
261.99	Acid Soluble Manganese , Other (%)	1		0.0026									
281.00	Acid Soluble Mercury , AA (ppm)	1		0.0040									
281.30	Acid Soluble Mercury , ICP (ppm)	2	1	0.0585									
281.99	Acid Soluble Mercury , Other (ppm)	1		0.0000									
289.30	Acid Soluble Molybdenum , ICP (ppm)	8	7	8.832	2.076	9.224		1.398	0.3737	15.16%		0.4883	11.45%
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w... (ppm)	3	3	8.587	0.7202	8.587		0.7202	0.2940	8.39%		0.2917	11.57%
289.99	Acid Soluble Molybdenum , Other (ppm)	3	3	8.182	0.8398	8.182		0.8398	0.3428	10.26%		0.8263	11.66%
291.00	Acid Soluble Nickel , AA, test portion as in 2006... (ppm)	1		69.50									
291.30	Acid Soluble Nickel , ICP (ppm)	9	9	52.99	13.89	57.62		4.811	1.134	8.35%		2.769	8.69%
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3... (ppm)	4	4	58.71	2.639	58.71		2.639	0.9330	4.49%		1.401	8.67%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	1		54.83									
291.99	Acid Soluble Nickel , Other (ppm)	4	4	49.23	17.87	49.23		17.87	6.319	36.31%		2.800	8.90%
301.30	Acid Soluble Selenium , ICP (ppm)	2	0	0.0000									
301.33	Acid Soluble Selenium , ICP, 2006.03 modified w/9... (ppm)	1		0.6356									
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	1		0.5340									
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test ... (%)	2	2	0.5286	0.0303								
311.99	Sodium, Other (%)	4	4	0.5140	0.0382	0.5140		0.0382	0.0135	7.42%		0.0095	4.42%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	3	2	0.0071	0.0006	0.0071		0.0006	0.0003	8.02%		0.0008	8.43%
321.30	Acid Soluble Zinc , ICP, test portion inorganic 9... (%)	18	17	0.0108	0.0133	0.0078		0.0026	0.0004	33.41%		0.0008	8.30%
321.31	Acid Soluble Zinc , ICP, test portion organic 965... (%)	1		0.9150									
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C (%)	1		64.65									

Method Code	Analyte & Method	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C... (%)	5	5	0.0064	0.0008	0.0064		0.0008	0.0002	11.78%		0.0002	8.55%
321.99	Acid Soluble Zinc , Other (%)	5	5	0.0064	0.0009	0.0064		0.0009	0.0003	14.45%		0.0005	8.56%
325.30	Water Soluble Zinc , ICP (%)	1		0.0000									

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 150711

Method Precision Report

Grade 3-8-8

Issue Date : 08/31/2015

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility SR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
010.11	Total Nitrogen, Modified Comprehensive (3%)	9	9	4.007	0.4193	0.4186	0.0337	0.4199	10.45%	0.84%	10.48%	12.47
010.60	Total Nitrogen, Combustion (3%)	60	55	4.285	0.2081	0.2052	0.0485	0.2109	4.79%	1.13%	4.92%	4.350
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium MolybdoP (%)	7	5	12.34	0.1052	0.1001	0.0458	0.1101	0.81%	0.37%	0.89%	2.402
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	17	16	12.10	0.5770	0.5713	0.1137	0.5825	4.72%	0.94%	4.82%	5.123
020.50	Total Phosphorus as P2O5, ICP (%)	15	15	12.14	0.9770	0.9658	0.2090	0.9881	7.96%	1.72%	8.14%	4.728
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	7	7	9.177	2.162	2.162	0.0431	2.163	23.56%	0.47%	23.57%	50.21
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-EDTA Ext. (8%)	6	6	11.03	1.727	1.724	0.1412	1.730	15.63%	1.28%	15.68%	12.25
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (8%)	12	11	10.62	0.7451	0.7424	0.0908	0.7479	6.99%	0.85%	7.04%	8.238
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	14	12	7.705	0.6225	0.6177	0.1093	0.6273	8.02%	1.42%	8.14%	5.738
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	6	5	8.466	0.3649	0.3394	0.1897	0.3888	4.01%	2.24%	4.59%	2.050
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	8	7	8.260	0.2834	0.2642	0.1451	0.3014	3.20%	1.76%	3.65%	2.078
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	7	6	8.452	0.2887	0.2867	0.0481	0.2907	3.39%	0.57%	3.44%	6.040
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	10	9	8.307	0.4485	0.4464	0.0608	0.4505	5.37%	0.73%	5.42%	7.407
050.99	Soluble Potassium as K2O, Other (8%)	24	23	8.520	0.5524	0.5455	0.1235	0.5593	6.40%	1.45%	6.56%	4.528
101.30	Acid Soluble Calcium, ICP, test portion inorganic 965.09 (%)	11	11	11.85	0.6079	0.5747	0.2804	0.6395	4.85%	2.37%	5.40%	2.281
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	10	9	3.587	0.3335	0.3217	0.1242	0.3449	8.97%	3.46%	9.61%	2.776
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (3%)	28	25	3.810	0.2601	0.2573	0.0541	0.2629	6.75%	1.42%	6.90%	4.858
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A-C, w/dual acid (3%)	7	6	3.637	0.2168	0.2109	0.0713	0.2226	5.80%	1.96%	6.12%	3.121
121.99	Acid Soluble Magnesium, Other (3%)	6	4	3.616	0.1569	0.1548	0.0359	0.1589	4.28%	0.99%	4.39%	4.429
131.30	Water Soluble Magnesium, ICP (%)	11	11	3.387	0.2168	0.2038	0.1044	0.2290	6.02%	3.08%	6.76%	2.193
148.07	Total Sulfur, ICP, test portion as in 2006.03 modified w/9:3 HNO3:HCl (%)	6	6	7.972	0.6070	0.5902	0.2005	0.6233	7.40%	2.52%	7.82%	3.109
191.30	Acid Soluble Chromium , ICP (ppm)	9	8	99.67	9.965	9.821	2.384	10.11	9.85%	2.39%	10.14%	4.240
202.30	Acid Soluble Cobalt , ICP (ppm)	7	6	2.181	0.4163	0.4155	0.0373	0.4171	19.05%	1.71%	19.13%	11.18
221.30	Acid Soluble Copper , ICP, test portion inorganic 965.09 (%)	10	7	0.0010	0.0007	0.0007	0.0001	0.0008	75.00%	14.85%	76.46%	5.148
241.30	Acid Soluble Iron , ICP, test portion inorganic 965.09 (%)	10	9	0.0686	0.0078	0.0076	0.0023	0.0079	11.07%	3.34%	11.56%	3.465
289.30	Acid Soluble Molybdenum , ICP (ppm)	8	5	9.854	0.7041	0.6991	0.1180	0.7090	7.09%	1.20%	7.20%	6.008
291.30	Acid Soluble Nickel , ICP (ppm)	9	8	56.97	7.592	7.471	1.912	7.712	13.11%	3.36%	13.54%	4.033
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (%)	18	15	0.0077	0.0021	0.0021	0.0003	0.0022	27.55%	4.18%	27.86%	6.674

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

# Methods: 118

Sample # 150711

Lab Values

# Labs Reporting: 88

Grade 3-8-8

Issue Date : 08/31/2015

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.99	Ammoniacal Nitrogen, Other (%)	0096	0.2300	0.0200	0.0072	0.0019	0.0200	1	118.80	1548%	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	0.0000	0.0000	0.0072	0.0019	0.0200	1	-3.84	50%	4
003.99	Water Insoluble Nitrogen, Other (%)	0027	3.995	0.0700			0.0700	1			0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0510	3.320*	0.0000	4.238	0.0762	0.0378	9	-12.05	11%	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0500	3.385*	0.0300	4.238	0.0762	0.0378	9	-11.19	10%	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0456	3.690*	0.0600	4.238	0.0762	0.0378	9	-7.19	6%	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0200	4.205	0.0900	4.238	0.0762	0.0378	9	-0.43	0%	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0090	4.270	0.0400	4.238	0.0762	0.0378	9	0.42	0%	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0105	4.280	0.0000	4.238	0.0762	0.0378	9	0.55	0%	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0114	4.285	0.0100	4.238	0.0762	0.0378	9	0.62	1%	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0371	4.305	0.0500	4.238	0.0762	0.0378	9	0.88	1%	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0220	4.320	0.0600	4.238	0.0762	0.0378	9	1.08	1%	0
010.12	Total Nitrogen, Salicylic (3%)	0117	4.150	0.0200	4.445	0.3627	0.0567	3	-0.81	3%	0
010.12	Total Nitrogen, Salicylic (3%)	0185	4.335	0.0500	4.445	0.3627	0.0567	3	-0.30	1%	0
010.12	Total Nitrogen, Salicylic (3%)	0498	4.850	0.1000	4.445	0.3627	0.0567	3	1.12	5%	0
010.60	Total Nitrogen, Combustion (3%)	0394	0.4350*	0.0100	4.315	0.0898	0.0524	57	-43.23	45%	0
010.60	Total Nitrogen, Combustion (3%)	0444	3.050*	0.1400	4.315	0.0898	0.0524	57	-14.10	15%	0
010.60	Total Nitrogen, Combustion (3%)	0037	3.895	0.0100	4.315	0.0898	0.0524	57	-4.68	5%	0
010.60	Total Nitrogen, Combustion (3%)	0275	3.920	0.0800	4.315	0.0898	0.0524	57	-4.40	5%	0
010.60	Total Nitrogen, Combustion (3%)	0354	4.069	0.0110	4.315	0.0898	0.0524	57	-2.75	3%	0
010.60	Total Nitrogen, Combustion (3%)	0489	4.095	0.0100	4.315	0.0898	0.0524	57	-2.46	3%	0
010.60	Total Nitrogen, Combustion (3%)	0291	4.125	0.0100	4.315	0.0898	0.0524	57	-2.12	2%	0
010.60	Total Nitrogen, Combustion (3%)	0023	4.177	0.0043	4.315	0.0898	0.0524	57	-1.54	2%	0
010.60	Total Nitrogen, Combustion (3%)	0422	4.213	0.0540	4.315	0.0898	0.0524	57	-1.14	1%	0
010.60	Total Nitrogen, Combustion (3%)	0035	4.230	0.0200	4.315	0.0898	0.0524	57	-0.95	1%	0
010.60	Total Nitrogen, Combustion (3%)	0233	4.232	0.1240	4.315	0.0898	0.0524	57	-0.93	1%	0
010.60	Total Nitrogen, Combustion (3%)	0102	4.235	0.0100	4.315	0.0898	0.0524	57	-0.90	1%	0
010.60	Total Nitrogen, Combustion (3%)	0040	4.250	0.1000	4.315	0.0898	0.0524	57	-0.73	1%	0
010.60	Total Nitrogen, Combustion (3%)	0390	4.250	0.1400	4.315	0.0898	0.0524	57	-0.73	1%	0
010.60	Total Nitrogen, Combustion (3%)	0025	4.260	0.1600	4.315	0.0898	0.0524	57	-0.62	1%	0
010.60	Total Nitrogen, Combustion (3%)	0452	4.265	0.0100	4.315	0.0898	0.0524	57	-0.56	1%	0
010.60	Total Nitrogen, Combustion (3%)	0095	4.275	0.0100	4.315	0.0898	0.0524	57	-0.45	0%	0
010.60	Total Nitrogen, Combustion (3%)	0034	4.280	0.0350	4.315	0.0898	0.0524	57	-0.40	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total Nitrogen, Combustion (3%)	0136	4.280	0.0400	4.315	0.0898	0.0524	57	-0.39	0%	0
010.60	Total Nitrogen, Combustion (3%)	0405	4.280	0.0400	4.315	0.0898	0.0524	57	-0.39	0%	0
010.60	Total Nitrogen, Combustion (3%)	0234	4.285	0.0700	4.315	0.0898	0.0524	57	-0.34	0%	0
010.60	Total Nitrogen, Combustion (3%)	0406	4.285	0.0000	4.315	0.0898	0.0524	57	-0.34	0%	0
010.60	Total Nitrogen, Combustion (3%)	0043	4.290	0.0000	4.315	0.0898	0.0524	57	-0.28	0%	0
010.60	Total Nitrogen, Combustion (3%)	0421	4.290	0.0200	4.315	0.0898	0.0524	57	-0.28	0%	0
010.60	Total Nitrogen, Combustion (3%)	0443	4.290	0.0600	4.315	0.0898	0.0524	57	-0.28	0%	0
010.60	Total Nitrogen, Combustion (3%)	0368	4.295	0.0954	4.315	0.0898	0.0524	57	-0.23	0%	0
010.60	Total Nitrogen, Combustion (3%)	0177	4.297	0.0200	4.315	0.0898	0.0524	57	-0.20	0%	0
010.60	Total Nitrogen, Combustion (3%)	0018	4.310	0.0200	4.315	0.0898	0.0524	57	-0.06	0%	0
010.60	Total Nitrogen, Combustion (3%)	0516	4.315	0.2100	4.315	0.0898	0.0524	57	0.00	0%	0
010.60	Total Nitrogen, Combustion (3%)	0157	4.320	0.0000	4.315	0.0898	0.0524	57	0.05	0%	0
010.60	Total Nitrogen, Combustion (3%)	0292	4.320	0.0000	4.315	0.0898	0.0524	57	0.05	0%	0
010.60	Total Nitrogen, Combustion (3%)	0451	4.330	0.0220	4.315	0.0898	0.0524	57	0.16	0%	0
010.60	Total Nitrogen, Combustion (3%)	0486	4.335	0.0100	4.315	0.0898	0.0524	57	0.22	0%	0
010.60	Total Nitrogen, Combustion (3%)	0105	4.345	0.0100	4.315	0.0898	0.0524	57	0.33	0%	0
010.60	Total Nitrogen, Combustion (3%)	0360	4.345	0.0700	4.315	0.0898	0.0524	57	0.33	0%	0
010.60	Total Nitrogen, Combustion (3%)	0377	4.345	0.0700	4.315	0.0898	0.0524	57	0.33	0%	0
010.60	Total Nitrogen, Combustion (3%)	0389	4.350	0.0400	4.315	0.0898	0.0524	57	0.39	0%	0
010.60	Total Nitrogen, Combustion (3%)	0494	4.350	0.0000	4.315	0.0898	0.0524	57	0.39	0%	0
010.60	Total Nitrogen, Combustion (3%)	0482	4.360	0.0200	4.315	0.0898	0.0524	57	0.50	1%	0
010.60	Total Nitrogen, Combustion (3%)	0483	4.360	0.1000	4.315	0.0898	0.0524	57	0.50	1%	0
010.60	Total Nitrogen, Combustion (3%)	0231	4.365	0.0100	4.315	0.0898	0.0524	57	0.55	1%	0
010.60	Total Nitrogen, Combustion (3%)	0481	4.369	0.0573	4.315	0.0898	0.0524	57	0.60	1%	0
010.60	Total Nitrogen, Combustion (3%)	0307	4.369	0.0820	4.315	0.0898	0.0524	57	0.60	1%	0
010.60	Total Nitrogen, Combustion (3%)	0325	4.375	0.0300	4.315	0.0898	0.0524	57	0.66	1%	0
010.60	Total Nitrogen, Combustion (3%)	0324	4.380	0.1000	4.315	0.0898	0.0524	57	0.72	1%	0
010.60	Total Nitrogen, Combustion (3%)	0117	4.390	0.0000	4.315	0.0898	0.0524	57	0.83	1%	0
010.60	Total Nitrogen, Combustion (3%)	0356	4.410	0.1200	4.315	0.0898	0.0524	57	1.05	1%	0
010.60	Total Nitrogen, Combustion (3%)	0230	4.415	0.0500	4.315	0.0898	0.0524	57	1.11	1%	0
010.60	Total Nitrogen, Combustion (3%)	0472	4.415	0.0100	4.315	0.0898	0.0524	57	1.11	1%	0
010.60	Total Nitrogen, Combustion (3%)	0096	4.420	0.0400	4.315	0.0898	0.0524	57	1.17	1%	0
010.60	Total Nitrogen, Combustion (3%)	0049	4.440	0.0400	4.315	0.0898	0.0524	57	1.39	1%	0
010.60	Total Nitrogen, Combustion (3%)	0073	4.445	0.0500	4.315	0.0898	0.0524	57	1.44	2%	0
010.60	Total Nitrogen, Combustion (3%)	0457	4.445	0.0500	4.315	0.0898	0.0524	57	1.44	2%	0
010.60	Total Nitrogen, Combustion (3%)	0007	4.450	0.1000	4.315	0.0898	0.0524	57	1.50	2%	0
010.60	Total Nitrogen, Combustion (3%)	0029	4.485	0.1310	4.315	0.0898	0.0524	57	1.88	2%	0
010.60	Total Nitrogen, Combustion (3%)	0055	4.490	0.0800	4.315	0.0898	0.0524	57	1.95	2%	0
010.60	Total Nitrogen, Combustion (3%)	0070	4.510	0.1800	4.315	0.0898	0.0524	57	2.17	2%	0
010.60	Total Nitrogen, Combustion (3%)	0162	3.801*	0.2930	4.315	0.0898	0.0524	57	-5.74	6%	1
010.60	Total Nitrogen, Combustion (3%)	0042	4.190	0.3800	4.315	0.0898	0.0524	57	-1.40	1%	1
010.60	Total Nitrogen, Combustion (3%)	0131	11.97	0.0000	4.315	0.0898	0.0524	57	85.28	89%	2
010.99	Total Nitrogen, Other (3%)	0487	4.150	0.1000	4.308	0.2323	0.1033	3	-0.68	2%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.99	Total Nitrogen, Other (3%)	0493	4.200	0.1000	4.308	0.2323	0.1033	3	-0.47	1%	0
010.99	Total Nitrogen, Other (3%)	0506	4.575	0.1100	4.308	0.2323	0.1033	3	1.15	3%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0322	9.235	0.0500	12.30	0.1535	0.0483	6	-19.99	12%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0500	12.20	0.0000	12.30	0.1535	0.0483	6	-0.68	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0136	12.30	0.0300	12.30	0.1535	0.0483	6	-0.06	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0157	12.35	0.1000	12.30	0.1535	0.0483	6	0.30	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0105	12.40	0.0100	12.30	0.1535	0.0483	6	0.59	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0090	12.48	0.1000	12.30	0.1535	0.0483	6	1.14	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0444	12.27	0.4300	12.30	0.1535	0.0483	6	-0.26	0%	1
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0457	8.865	0.3500	12.13	0.3206	0.1276	17	-10.18	13%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	10.24	0.0300	12.13	0.3206	0.1276	17	-5.91	8%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	11.85	0.3400	12.13	0.3206	0.1276	17	-0.87	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0481	11.88	0.1700	12.13	0.3206	0.1276	17	-0.79	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	11.90	0.0000	12.13	0.3206	0.1276	17	-0.71	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0428	11.93	0.0328	12.13	0.3206	0.1276	17	-0.62	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	12.13	0.0400	12.13	0.3206	0.1276	17	0.01	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0516	12.13	0.3800	12.13	0.3206	0.1276	17	0.01	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	12.14	0.0000	12.13	0.3206	0.1276	17	0.04	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0513	12.20	0.0800	12.13	0.3206	0.1276	17	0.22	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0027	12.24	0.0100	12.13	0.3206	0.1276	17	0.33	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0394	12.25	0.1000	12.13	0.3206	0.1276	17	0.38	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0489	12.25	0.1000	12.13	0.3206	0.1276	17	0.38	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	12.35	0.0300	12.13	0.3206	0.1276	17	0.68	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0406	12.39	0.1760	12.13	0.3206	0.1276	17	0.81	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0420	12.73	0.2300	12.13	0.3206	0.1276	17	1.86	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0506	12.95	0.1000	12.13	0.3206	0.1276	17	2.56	3%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0096	12.04	0.0500	12.38	0.4889	0.0700	5	-0.71	1%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0042	12.05	0.0800	12.38	0.4889	0.0700	5	-0.68	1%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0035	12.28	0.0200	12.38	0.4889	0.0700	5	-0.21	0%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0105	12.32	0.0500	12.38	0.4889	0.0700	5	-0.13	0%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0456	13.23	0.1500	12.38	0.4889	0.0700	5	1.73	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0291	10.31	0.0100	12.19	0.9721	0.2242	15	-1.94	8%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0023	10.66	0.0500	12.19	0.9721	0.2242	15	-1.58	6%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0260	10.71	0.2400	12.19	0.9721	0.2242	15	-1.53	6%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	11.84	0.0700	12.19	0.9721	0.2242	15	-0.37	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0368	11.86	0.0881	12.19	0.9721	0.2242	15	-0.35	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	12.16	0.2000	12.19	0.9721	0.2242	15	-0.04	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	12.18	0.3600	12.19	0.9721	0.2242	15	-0.01	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0157	12.20	0.2000	12.19	0.9721	0.2242	15	0.01	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	12.20	0.1400	12.19	0.9721	0.2242	15	0.01	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0422	12.29	0.1950	12.19	0.9721	0.2242	15	0.10	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	12.80	0.2000	12.19	0.9721	0.2242	15	0.62	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0390	12.85	0.7000	12.19	0.9721	0.2242	15	0.67	3%	0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
020.50	Total Phosphorus as P2O5, ICP (%)	0307	12.98	0.3400	12.19	0.9721	0.2242	15	0.81	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	13.43	0.0000	12.19	0.9721	0.2242	15	1.27	5%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	13.64	0.5700	12.19	0.9721	0.2242	15	1.48	6%	0
020.99	Total Phosphorus as P2O5, Other (%)	0443	10.77	1.210	11.46	0.9793	0.6550	2	-0.71	3%	0
020.99	Total Phosphorus as P2O5, Other (%)	0487	12.15	0.1000	11.46	0.9793	0.6550	2	0.71	3%	0
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	2.360	0.0200			0.0200	1			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (8%)	0394	6.200*	0.0000	9.200	4.243	0.0400	2	-0.71	16%	0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (8%)	0513	12.20	0.0800	9.200	4.243	0.0400	2	0.71	16%	0
040.40	Indirect Available Phosphorus as P2O5, Automa... (8%)	0096	9.680	0.0400			0.0400	1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0177	10.04	0.2067	11.41	0.8802	0.1093	5	-1.55	6%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0494	11.08	0.0700	11.41	0.8802	0.1093	5	-0.38	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0040	11.65	0.1000	11.41	0.8802	0.1093	5	0.27	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0102	12.10	0.0000	11.41	0.8802	0.1093	5	0.79	3%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0049	12.18	0.1700	11.41	0.8802	0.1093	5	0.87	3%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0185	10.67	0.1000	11.09	0.3057	0.1420	5	-1.38	2%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0055	10.98	0.2100	11.09	0.3057	0.1420	5	-0.38	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0493	11.05	0.1000	11.09	0.3057	0.1420	5	-0.13	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0485	11.30	0.0500	11.09	0.3057	0.1420	5	0.67	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (8%)	0105	11.47	0.2500	11.09	0.3057	0.1420	5	1.22	2%	0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (8%)	0498	7.200*	0.2000			0.2000	1			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (8%)	0055	8.460*	0.0000	9.744	1.602	0.0625	4	-0.80	7%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (8%)	0117	9.130*	0.1400	9.744	1.602	0.0625	4	-0.38	3%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (8%)	0200	9.300*	0.0800	9.744	1.602	0.0625	4	-0.28	2%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (8%)	0513	12.09	0.0300	9.744	1.602	0.0625	4	1.46	12%	0
041.40	Direct Available Phosphorus as P2O5, Automate... (8%)	0095	5.515*	0.0300	8.533	4.267	0.0650	2	-0.71	18%	0
041.40	Direct Available Phosphorus as P2O5, Automate... (8%)	0018	11.55	0.1000	8.533	4.267	0.0650	2	0.71	18%	0
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	0325	5.015*	0.0100	9.412	1.293	0.0479	7	-3.40	23%	0
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	0007	8.600*	0.0000	9.412	1.293	0.0479	7	-0.63	4%	0
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	0452	8.915*	0.0100	9.412	1.293	0.0479	7	-0.38	3%	0
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	0043	9.355*	0.0700	9.412	1.293	0.0479	7	-0.04	0%	0
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	0368	9.884	0.0853	9.412	1.293	0.0479	7	0.37	3%	0
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	0037	10.42	0.0600	9.412	1.293	0.0479	7	0.78	5%	0
041.50	Direct Available Phosphorus as P2O5, ICP (8%)	0070	12.05	0.1000	9.412	1.293	0.0479	7	2.04	14%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (8%)	0025	7.940*	0.3800	11.25	1.455	0.1517	6	-2.28	15%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (8%)	0131	10.29	0.0000	11.25	1.455	0.1517	6	-0.66	4%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (8%)	0360	11.45	0.1800	11.25	1.455	0.1517	6	0.14	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (8%)	0486	11.53	0.1500	11.25	1.455	0.1517	6	0.19	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (8%)	0377	12.30	0.0000	11.25	1.455	0.1517	6	0.72	5%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (8%)	0421	12.70	0.2000	11.25	1.455	0.1517	6	0.99	6%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0220	9.535*	0.0900	10.57	0.8228	0.1279	12	-1.26	5%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0043	9.605*	0.0900	10.57	0.8228	0.1279	12	-1.18	5%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0472	9.975	0.1100	10.57	0.8228	0.1279	12	-0.73	3%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0177	10.06	0.4424	10.57	0.8228	0.1279	12	-0.63	2%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0231	10.16	0.1000	10.57	0.8228	0.1279	12	-0.50	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0073	10.63	0.0500	10.57	0.8228	0.1279	12	0.06	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0028	10.67	0.1100	10.57	0.8228	0.1279	12	0.11	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0029	10.77	0.0100	10.57	0.8228	0.1279	12	0.23	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0354	11.00	0.0890	10.57	0.8228	0.1279	12	0.52	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0105	11.21	0.0600	10.57	0.8228	0.1279	12	0.77	3%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0034	11.48	0.0440	10.57	0.8228	0.1279	12	1.10	4%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (8%)	0351	11.83	0.3389	10.57	0.8228	0.1279	12	1.53	6%	0
041.99	Direct Available Phosphorus as P2O5, Other (8%)	0506	8.765*	0.1300	11.53	3.914	0.1650	2	-0.71	12%	0
041.99	Direct Available Phosphorus as P2O5, Other (8%)	0230	14.30	0.2000	11.53	3.914	0.1650	2	0.71	12%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0394	0.1000	0.0000	0.5500	0.6364	0.0000	2	-0.71	41%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0405	1.000	0.0000	0.5500	0.6364	0.0000	2	0.71	41%	0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	0.1400	0.0000			0.0000	1			0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0049	6.510*	0.2400	7.819	0.7334	0.1192	13	-1.78	8%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0230	6.995*	0.3300	7.819	0.7334	0.1192	13	-1.12	5%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0405	7.120*	0.1000	7.819	0.7334	0.1192	13	-0.95	4%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0494	7.380*	0.2800	7.819	0.7334	0.1192	13	-0.60	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0489	7.510*	0.0200	7.819	0.7334	0.1192	13	-0.42	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0231	7.785	0.1100	7.819	0.7334	0.1192	13	-0.05	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0114	7.880	0.0600	7.819	0.7334	0.1192	13	0.08	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0055	7.945	0.0700	7.819	0.7334	0.1192	13	0.17	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0211	8.085	0.0300	7.819	0.7334	0.1192	13	0.36	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0220	8.205	0.0100	7.819	0.7334	0.1192	13	0.53	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0493	8.450	0.1000	7.819	0.7334	0.1192	13	0.86	4%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0102	8.600	0.0000	7.819	0.7334	0.1192	13	1.07	5%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0090	20.87	0.2000	7.819	0.7334	0.1192	13	17.80	83%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0073	8.505	1.010	7.819	0.7334	0.1192	13	0.94	4%	1
050.10	Soluble Potassium as K2O, STPB Citrate (8%)	0322	4.945*	0.0300			0.0300	1			0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0516	8.050	0.4400	8.585	0.4971	0.2038	6	-1.08	3%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0040	8.300	0.4000	8.585	0.4971	0.2038	6	-0.57	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0136	8.345	0.0100	8.585	0.4971	0.2038	6	-0.48	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0157	8.630	0.0600	8.585	0.4971	0.2038	6	0.09	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0356	9.005	0.0500	8.585	0.4971	0.2038	6	0.84	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0428	10.51	0.2625	8.585	0.4971	0.2038	6	3.88	11%	0
050.31	Soluble Potassium as K2O, AA (Citrate) (8%)	0472	7.915	0.0300			0.0300	1			0
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (8%)	0185	8.515	0.1100			0.1100	1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0390	7.830	0.0000	8.331	0.3744	0.1868	8	-1.34	3%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0157	8.075	0.0700	8.331	0.3744	0.1868	8	-0.68	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0444	8.145	0.0300	8.331	0.3744	0.1868	8	-0.50	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0055	8.255	0.0700	8.331	0.3744	0.1868	8	-0.20	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0420	8.298	0.1800	8.331	0.3744	0.1868	8	-0.09	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0292	8.570	0.0400	8.331	0.3744	0.1868	8	0.64	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0324	8.650	0.5000	8.331	0.3744	0.1868	8	0.85	2%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0406	10.49	0.6040	8.331	0.3744	0.1868	8	5.76	13%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0070	7.905	0.0700	8.571	0.2460	0.0771	7	-2.71	4%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0131	8.425	0.0500	8.571	0.2460	0.0771	7	-0.59	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0043	8.445	0.0500	8.571	0.2460	0.0771	7	-0.51	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0291	8.595	0.0100	8.571	0.2460	0.0771	7	0.10	0%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0483	8.645	0.1300	8.571	0.2460	0.0771	7	0.30	0%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0452	8.695	0.0300	8.571	0.2460	0.0771	7	0.51	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0007	12.00	0.2000	8.571	0.2460	0.0771	7	13.94	20%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0485	7.920	0.1400	8.323	0.4419	0.0942	10	-0.91	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0486	7.930	0.0800	8.323	0.4419	0.0942	10	-0.89	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0025	7.950	0.1600	8.323	0.4419	0.0942	10	-0.84	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0354	8.026	0.0020	8.323	0.4419	0.0942	10	-0.67	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0117	8.130	0.0800	8.323	0.4419	0.0942	10	-0.44	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0037	8.355	0.0300	8.323	0.4419	0.0942	10	0.07	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0377	8.440	0.0600	8.323	0.4419	0.0942	10	0.27	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0421	8.750	0.3000	8.323	0.4419	0.0942	10	0.97	3%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0360	8.810	0.0400	8.323	0.4419	0.0942	10	1.10	3%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0023	9.205	0.0500	8.323	0.4419	0.0942	10	2.00	5%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0200	8.030	0.0000	9.323	1.968	0.3850	4	-0.66	7%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0105	8.180	0.0200	9.323	1.968	0.3850	4	-0.58	6%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0510	8.855	0.0300	9.323	1.968	0.3850	4	-0.24	3%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0443	12.23	1.490	9.323	1.968	0.3850	4	1.47	16%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (8%)	0035	7.935	0.0500	8.233	0.2007	0.0438	4	-1.49	2%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (8%)	0456	8.300	0.0200	8.233	0.2007	0.0438	4	0.33	0%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (8%)	0513	8.330	0.0600	8.233	0.2007	0.0438	4	0.48	1%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (8%)	0034	8.368	0.0450	8.233	0.2007	0.0438	4	0.67	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0105	8.165	0.1300	8.419	0.1823	0.2580	5	-1.39	2%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0029	8.295	0.1700	8.419	0.1823	0.2580	5	-0.68	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0028	8.515	0.2700	8.419	0.1823	0.2580	5	0.53	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0095	8.515	0.5100	8.419	0.1823	0.2580	5	0.53	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0018	8.605	0.2100	8.419	0.1823	0.2580	5	1.02	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0498	2.530*	0.1000	8.451	0.5841	0.1222	24	-10.14	35%	0
050.99	Soluble Potassium as K2O, Other (8%)	0481	7.635*	0.0300	8.451	0.5841	0.1222	24	-1.40	5%	0
050.99	Soluble Potassium as K2O, Other (8%)	0325	7.735	0.2300	8.451	0.5841	0.1222	24	-1.23	4%	0
050.99	Soluble Potassium as K2O, Other (8%)	0096	7.925	0.0300	8.451	0.5841	0.1222	24	-0.90	3%	0
050.99	Soluble Potassium as K2O, Other (8%)	0042	7.965	0.3900	8.451	0.5841	0.1222	24	-0.83	3%	0
050.99	Soluble Potassium as K2O, Other (8%)	0506	8.055	0.1500	8.451	0.5841	0.1222	24	-0.68	2%	0
050.99	Soluble Potassium as K2O, Other (8%)	0500	8.125	0.0300	8.451	0.5841	0.1222	24	-0.56	2%	0
050.99	Soluble Potassium as K2O, Other (8%)	0368	8.132	0.0207	8.451	0.5841	0.1222	24	-0.55	2%	0
050.99	Soluble Potassium as K2O, Other (8%)	0394	8.200	0.0000	8.451	0.5841	0.1222	24	-0.43	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0457	8.320	0.3200	8.451	0.5841	0.1222	24	-0.22	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0482	8.350	0.0400	8.451	0.5841	0.1222	24	-0.17	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0389	8.390	0.1000	8.451	0.5841	0.1222	24	-0.10	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
050.99	Soluble Potassium as K2O, Other (8%)	0027	8.488	0.2920	8.451	0.5841	0.1222	24	0.06	0%	0
050.99	Soluble Potassium as K2O, Other (8%)	0234	8.500	0.4000	8.451	0.5841	0.1222	24	0.08	0%	0
050.99	Soluble Potassium as K2O, Other (8%)	0043	8.550	0.0400	8.451	0.5841	0.1222	24	0.17	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0371	8.565	0.0100	8.451	0.5841	0.1222	24	0.19	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0444	8.670	0.1400	8.451	0.5841	0.1222	24	0.37	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0177	8.835	0.1221	8.451	0.5841	0.1222	24	0.66	2%	0
050.99	Soluble Potassium as K2O, Other (8%)	0422	8.965	0.2100	8.451	0.5841	0.1222	24	0.88	3%	0
050.99	Soluble Potassium as K2O, Other (8%)	0275	8.975	0.0300	8.451	0.5841	0.1222	24	0.90	3%	0
050.99	Soluble Potassium as K2O, Other (8%)	0307	8.996	0.0070	8.451	0.5841	0.1222	24	0.93	3%	0
050.99	Soluble Potassium as K2O, Other (8%)	0451	9.265	0.1500	8.451	0.5841	0.1222	24	1.39	5%	0
050.99	Soluble Potassium as K2O, Other (8%)	0260	9.515	0.0900	8.451	0.5841	0.1222	24	1.82	6%	0
050.99	Soluble Potassium as K2O, Other (8%)	0487	9.800	0.0000	8.451	0.5841	0.1222	24	2.31	8%	0
060.00	Water (Free), Vacuum Oven (%)	0456	3.085	0.0500	3.282	0.2337	0.0833	3	-0.84	3%	0
060.00	Water (Free), Vacuum Oven (%)	0007	3.220	0.2000	3.282	0.2337	0.0833	3	-0.26	1%	0
060.00	Water (Free), Vacuum Oven (%)	0096	3.540	0.0000	3.282	0.2337	0.0833	3	1.11	4%	0
060.99	Water (Free), Other (%)	0510	5.020	0.0600			0.0600	1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0041	11.25	0.1000	11.73	0.4647	0.2499	11	-1.02	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	11.29	0.1220	11.73	0.4647	0.2499	11	-0.93	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0472	11.36	0.0800	11.73	0.4647	0.2499	11	-0.79	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0420	11.46	0.0200	11.73	0.4647	0.2499	11	-0.57	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	11.50	0.2100	11.73	0.4647	0.2499	11	-0.50	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	11.60	0.0000	11.73	0.4647	0.2499	11	-0.27	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0102	11.72	0.0160	11.73	0.4647	0.2499	11	-0.02	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0307	11.96	0.9310	11.73	0.4647	0.2499	11	0.49	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0035	12.50	0.8000	11.73	0.4647	0.2499	11	1.67	3%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0049	12.74	0.3700	11.73	0.4647	0.2499	11	2.17	4%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	12.95	0.1000	11.73	0.4647	0.2499	11	2.63	5%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0494	11.33	0.2791	11.54	0.2949	0.2896	2	-0.71	1%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0421	11.75	0.3000	11.54	0.2949	0.2896	2	0.71	1%	0
101.99	Acid Soluble Calcium, Other (%)	0389	11.11	0.1000	11.43	0.4525	0.4000	2	-0.71	1%	0
101.99	Acid Soluble Calcium, Other (%)	0390	11.75	0.7000	11.43	0.4525	0.4000	2	0.71	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0513	2.795*	0.0700	3.685	0.2302	0.1293	10	-3.87	12%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0029	3.458	0.3620	3.685	0.2302	0.1293	10	-0.99	3%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0457	3.525	0.0700	3.685	0.2302	0.1293	10	-0.70	2%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0043	3.610	0.0600	3.685	0.2302	0.1293	10	-0.33	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0157	3.620	0.0000	3.685	0.2302	0.1293	10	-0.28	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0516	3.742	0.2012	3.685	0.2302	0.1293	10	0.25	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0040	3.785	0.0900	3.685	0.2302	0.1293	10	0.43	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0105	3.800	0.2800	3.685	0.2302	0.1293	10	0.50	2%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0485	3.950	0.0800	3.685	0.2302	0.1293	10	1.15	4%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (3%)	0481	5.680	0.0800	3.685	0.2302	0.1293	10	8.67	27%	0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (3%)	0136	3.660	0.0400			0.0400	1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0291	3.265*	0.0100	3.797	0.2030	0.0650	26	-2.62	7%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0433	3.429	0.0080	3.797	0.2030	0.0650	26	-1.82	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0096	3.575	0.1100	3.797	0.2030	0.0650	26	-1.10	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0444	3.600	0.0400	3.797	0.2030	0.0650	26	-0.97	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0157	3.620	0.0200	3.797	0.2030	0.0650	26	-0.87	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0368	3.668	0.0196	3.797	0.2030	0.0650	26	-0.64	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0095	3.670	0.1000	3.797	0.2030	0.0650	26	-0.63	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0090	3.675	0.0300	3.797	0.2030	0.0650	26	-0.60	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0360	3.675	0.0700	3.797	0.2030	0.0650	26	-0.60	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0482	3.710	0.0000	3.797	0.2030	0.0650	26	-0.43	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0230	3.730	0.1400	3.797	0.2030	0.0650	26	-0.33	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0354	3.757	0.1090	3.797	0.2030	0.0650	26	-0.20	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0102	3.795	0.0000	3.797	0.2030	0.0650	26	-0.01	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0220	3.805	0.0500	3.797	0.2030	0.0650	26	0.04	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0114	3.810	0.0200	3.797	0.2030	0.0650	26	0.06	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0055	3.825	0.0100	3.797	0.2030	0.0650	26	0.14	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0420	3.829	0.0172	3.797	0.2030	0.0650	26	0.16	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0324	3.840	0.1400	3.797	0.2030	0.0650	26	0.21	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0390	3.840	0.2800	3.797	0.2030	0.0650	26	0.21	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0307	3.891	0.1160	3.797	0.2030	0.0650	26	0.46	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0406	4.011	0.0300	3.797	0.2030	0.0650	26	1.05	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0234	4.040	0.1200	3.797	0.2030	0.0650	26	1.19	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0231	4.100	0.0200	3.797	0.2030	0.0650	26	1.49	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0472	4.270	0.0000	3.797	0.2030	0.0650	26	2.33	6%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0483	4.270	0.0600	3.797	0.2030	0.0650	26	2.33	6%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0049	4.395	0.1700	3.797	0.2030	0.0650	26	2.94	8%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0041	3.765	0.3500	3.797	0.2030	0.0650	26	-0.16	0%	1
121.30	Acid Soluble Magnesium, ICP, test portion ino... (3%)	0035	0.3410*	0.0020	3.797	0.2030	0.0650	26	-17.03	46%	2
121.32	Acid Soluble Magnesium, ICP, test portion 200... (3%)	0394	3.330*	0.0000			0.0000	1			0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (3%)	0515	3.322*	0.1170	3.646	0.2294	0.0783	6	-1.41	4%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (3%)	0486	3.445	0.0300	3.646	0.2294	0.0783	6	-0.88	3%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (3%)	0117	3.685	0.0700	3.646	0.2294	0.0783	6	0.17	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (3%)	0421	3.700	0.2000	3.646	0.2294	0.0783	6	0.24	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (3%)	0023	3.755	0.0170	3.646	0.2294	0.0783	6	0.47	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (3%)	0177	3.917	0.0355	3.646	0.2294	0.0783	6	1.18	4%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (3%)	0494	3.974	0.6061	3.646	0.2294	0.0783	6	1.43	5%	1
121.99	Acid Soluble Magnesium, Other (3%)	0042	3.420	0.0200	3.734	0.2564	0.0617	6	-1.22	4%	0
121.99	Acid Soluble Magnesium, Other (3%)	0506	3.585	0.0300	3.734	0.2564	0.0617	6	-0.58	2%	0
121.99	Acid Soluble Magnesium, Other (3%)	0389	3.665	0.0300	3.734	0.2564	0.0617	6	-0.27	1%	0
121.99	Acid Soluble Magnesium, Other (3%)	0512	3.795	0.0900	3.734	0.2564	0.0617	6	0.24	1%	0
121.99	Acid Soluble Magnesium, Other (3%)	0422	3.880	0.2000	3.734	0.2564	0.0617	6	0.57	2%	0
121.99	Acid Soluble Magnesium, Other (3%)	0260	5.090	0.0000	3.734	0.2564	0.0617	6	5.29	18%	0
131.00	Water Soluble Magnesium, AA (%)	0513	2.755	0.0500	3.293	0.5778	0.1332	5	-0.93	8%	0
131.00	Water Soluble Magnesium, AA (%)	0029	2.898	0.2140	3.293	0.5778	0.1332	5	-0.68	6%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
131.00	Water Soluble Magnesium, AA (%)	0485	3.215	0.0100	3.293	0.5778	0.1332	5	-0.14	1%	0
131.00	Water Soluble Magnesium, AA (%)	0105	3.369	0.1520	3.293	0.5778	0.1332	5	0.13	1%	0
131.00	Water Soluble Magnesium, AA (%)	0200	4.230	0.2400	3.293	0.5778	0.1332	5	1.62	14%	0
131.30	Water Soluble Magnesium, ICP (%)	0394	2.910	0.0000	3.399	0.1583	0.1034	11	-3.09	7%	0
131.30	Water Soluble Magnesium, ICP (%)	0027	3.221	0.0650	3.399	0.1583	0.1034	11	-1.13	3%	0
131.30	Water Soluble Magnesium, ICP (%)	0117	3.270	0.3200	3.399	0.1583	0.1034	11	-0.82	2%	0
131.30	Water Soluble Magnesium, ICP (%)	0275	3.325	0.0700	3.399	0.1583	0.1034	11	-0.47	1%	0
131.30	Water Soluble Magnesium, ICP (%)	0220	3.405	0.0100	3.399	0.1583	0.1034	11	0.04	0%	0
131.30	Water Soluble Magnesium, ICP (%)	0231	3.415	0.1300	3.399	0.1583	0.1034	11	0.10	0%	0
131.30	Water Soluble Magnesium, ICP (%)	0230	3.438	0.0960	3.399	0.1583	0.1034	11	0.25	1%	0
131.30	Water Soluble Magnesium, ICP (%)	0368	3.445	0.3059	3.399	0.1583	0.1034	11	0.29	1%	0
131.30	Water Soluble Magnesium, ICP (%)	0444	3.520	0.0600	3.399	0.1583	0.1034	11	0.76	2%	0
131.30	Water Soluble Magnesium, ICP (%)	0055	3.535	0.0100	3.399	0.1583	0.1034	11	0.86	2%	0
131.30	Water Soluble Magnesium, ICP (%)	0371	3.775	0.0700	3.399	0.1583	0.1034	11	2.37	6%	0
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0510	4.030	0.0200			0.0200	1			0
143.99	Elemental Sulfur, Other (%)	0472	7.500	0.0000	7.927	0.4352	0.0933	3	-0.98	3%	0
143.99	Elemental Sulfur, Other (%)	0390	7.910	0.2200	7.927	0.4352	0.0933	3	-0.04	0%	0
143.99	Elemental Sulfur, Other (%)	0389	8.370	0.0600	7.927	0.4352	0.0933	3	1.02	3%	0
148.00	Total Sulfur, Combustion (%)	0451	7.845	0.2090	9.585	2.461	0.1140	2	-0.71	9%	0
148.00	Total Sulfur, Combustion (%)	0131	11.33	0.0190	9.585	2.461	0.1140	2	0.71	9%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (%)	0105	6.700	0.0200	7.205	0.7142	0.0140	2	-0.71	4%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (%)	0102	7.710	0.0080	7.205	0.7142	0.0140	2	0.71	4%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0406	7.163	0.0740	7.983	0.6689	0.2265	6	-1.23	5%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0421	7.300	0.2000	7.983	0.6689	0.2265	6	-1.02	4%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0102	8.044	0.5070	7.983	0.6689	0.2265	6	0.09	0%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0494	8.233	0.3881	7.983	0.6689	0.2265	6	0.37	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0483	8.535	0.1700	7.983	0.6689	0.2265	6	0.82	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0292	8.560	0.0200	7.983	0.6689	0.2265	6	0.86	4%	0
148.99	Total Sulfur, Other (%)	0096	7.435	0.0900	8.103	0.5106	0.1392	5	-1.31	4%	0
148.99	Total Sulfur, Other (%)	0390	7.910	0.2200	8.103	0.5106	0.1392	5	-0.38	1%	0
148.99	Total Sulfur, Other (%)	0307	8.045	0.0250	8.103	0.5106	0.1392	5	-0.12	0%	0
148.99	Total Sulfur, Other (%)	0354	8.308	0.1410	8.103	0.5106	0.1392	5	0.40	1%	0
148.99	Total Sulfur, Other (%)	0482	8.820	0.2200	8.103	0.5106	0.1392	5	1.40	4%	0
151.00	Acid Soluble Arsenic , AA, test portion as i... (ppm)	0136	0.1650	0.0300			0.0300	1			0
151.30	Acid Soluble Arsenic , ICP (ppm)	0394	0.1300	0.0200	0.6100	0.6788	0.0300	2	-0.71	39%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0230	1.090	0.0400	0.6100	0.6788	0.0300	2	0.71	39%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0368	0.0000	0.0000	0.6100	0.6788	0.0300	2	-0.90	50%	4
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified... (ppm)	0494	0.6762	0.0687			0.0687	1			0
151.99	Acid Soluble Arsenic , Other (ppm)	0220	0.2700	0.0200	0.2777	0.0109	0.2717	2	-0.71	1%	0
151.99	Acid Soluble Arsenic , Other (ppm)	0515	0.2854	0.5234	0.2777	0.0109	0.2717	2	0.71	1%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (%)	0389	0.0014	0.0002	0.0032	0.0025	0.0011	2	-0.71	28%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (%)	0354	0.0050	0.0020	0.0032	0.0025	0.0011	2	0.71	28%	0
165.99	Acid Soluble Boron , Other (%)	0421	0.0024	0.0009			0.0009	1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
171.10	Water Soluble Boron , Spectrophotometric (%)	0105	0.0151	0.0061			0.0061	1			0
181.30	Acid Soluble Cadmium , ICP (ppm)	0102	0.0525	0.0010	0.0788	0.0371	0.0055	2	-0.71	17%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	0.1050	0.0100	0.0788	0.0371	0.0055	2	0.71	17%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0230	0.0000	0.0000	0.0788	0.0371	0.0055	2	-2.12	50%	4
181.30	Acid Soluble Cadmium , ICP (ppm)	0368	0.0000	0.0000	0.0788	0.0371	0.0055	2	-2.12	50%	4
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0494	0.0338	0.0004	0.9792	1.337	0.5177	2	-0.71	48%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0515	1.925	1.035	0.9792	1.337	0.5177	2	0.71	48%	0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000			0.0000	0			4
190.00	Water Soluble Chlorine, Titrimetric (%)	0105	0.4850	0.0100			0.0100	1			0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	47.15	5.500	97.47	12.96	2.962	9	-3.88	26%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0394	86.90	1.800	97.47	12.96	2.962	9	-0.82	5%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	86.90	2.000	97.47	12.96	2.962	9	-0.82	5%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0444	91.22	4.730	97.47	12.96	2.962	9	-0.48	3%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	100.5	1.000	97.47	12.96	2.962	9	0.23	2%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0368	105.0	0.0000	97.47	12.96	2.962	9	0.58	4%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0102	106.5	4.129	97.47	12.96	2.962	9	0.70	5%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0230	109.5	1.000	97.47	12.96	2.962	9	0.93	6%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	110.9	6.500	97.47	12.96	2.962	9	1.03	7%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0494	106.4	3.580	114.0	6.915	1.555	4	-1.09	3%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0027	110.1	0.1990	114.0	6.915	1.555	4	-0.56	2%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0037	118.0	0.5100	114.0	6.915	1.555	4	0.59	2%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0515	121.4	1.930	114.0	6.915	1.555	4	1.07	3%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0515	98.46	17.83			17.83	1			0
191.99	Acid Soluble Chromium , Other (ppm)	0512	44.30	16.00	94.20	33.79	9.750	4	-1.48	26%	0
191.99	Acid Soluble Chromium , Other (ppm)	0220	104.0	18.00	94.20	33.79	9.750	4	0.29	5%	0
191.99	Acid Soluble Chromium , Other (ppm)	0481	110.0	4.000	94.20	33.79	9.750	4	0.47	8%	0
191.99	Acid Soluble Chromium , Other (ppm)	0506	118.5	1.000	94.20	33.79	9.750	4	0.72	13%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0035	1.455	0.0300	2.218	0.3483	0.0614	7	-2.19	17%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0102	1.975	0.0300	2.218	0.3483	0.0614	7	-0.70	5%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	2.200	0.2000	2.218	0.3483	0.0614	7	-0.05	0%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0368	2.250	0.1000	2.218	0.3483	0.0614	7	0.09	1%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	2.300	0.0000	2.218	0.3483	0.0614	7	0.24	2%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0230	2.520	0.0000	2.218	0.3483	0.0614	7	0.87	7%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	2.585	0.0700	2.218	0.3483	0.0614	7	1.05	8%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0515	1.284	0.2513	2.142	0.7466	0.1499	3	-1.15	20%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0494	2.490	0.1183	2.142	0.7466	0.1499	3	0.47	8%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0037	2.650	0.0800	2.142	0.7466	0.1499	3	0.68	12%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	1.510	0.1910			0.1910	1			0
202.99	Acid Soluble Cobalt , Other (ppm)	0220	2.250	0.1000	6.100	3.901	5.667	3	-0.99	32%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0506	6.000	1.000	6.100	3.901	5.667	3	-0.03	1%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0512	10.05	15.90	6.100	3.901	5.667	3	1.01	32%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0105	0.0007	0.0000	0.0008	0.0001	0.0001	2	-0.71	5%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0043	0.0009	0.0001	0.0008	0.0001	0.0001	2	0.71	5%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0102	0.0004	0.0000	0.0010	0.0007	0.0004	8	-0.86	31%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0096	0.0005	0.0001	0.0010	0.0007	0.0004	8	-0.80	28%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0230	0.0005	0.0000	0.0010	0.0007	0.0004	8	-0.73	26%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0368	0.0005	0.0000	0.0010	0.0007	0.0004	8	-0.73	26%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0324	0.0013	0.0003	0.0010	0.0007	0.0004	8	0.30	11%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0433	0.0014	0.0004	0.0010	0.0007	0.0004	8	0.50	18%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0035	0.0024	0.0002	0.0010	0.0007	0.0004	8	1.87	66%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0354	0.0040	0.0020	0.0010	0.0007	0.0004	8	4.06	144%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0055	5.000	2.000	0.0010	0.0007	0.0004	8	6834.84	242314%	3
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0041	0.0000	0.0000	0.0010	0.0007	0.0004	8	-1.41	50%	4
221.31	Acid Soluble Copper , ICP, test portion orga... (%)	0131	0.8450	0.0300			0.0300	1			0
221.32	Acid Soluble Copper , ICP, test portion 2006... (%)	0394	5.915	0.1500			0.1500	0			3
221.33	Acid Soluble Copper , ICP, test portion 2006... (%)	0494	0.0005	0.0000	0.0007	0.0002	0.0001	2	-0.71	13%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (%)	0515	0.0009	0.0001	0.0007	0.0002	0.0001	2	0.71	13%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (%)	0037	4.315	0.1100	0.0007	0.0002	0.0001	2	17432.51	319580%	3
221.99	Acid Soluble Copper , Other (%)	0220	0.0005	0.0001	0.0008	0.0005	0.0003	5	-0.71	21%	0
221.99	Acid Soluble Copper , Other (%)	0515	0.0005	0.0003	0.0008	0.0005	0.0003	5	-0.71	21%	0
221.99	Acid Soluble Copper , Other (%)	0389	0.0005	0.0000	0.0008	0.0005	0.0003	5	-0.60	18%	0
221.99	Acid Soluble Copper , Other (%)	0506	0.0010	0.0000	0.0008	0.0005	0.0003	5	0.47	14%	0
221.99	Acid Soluble Copper , Other (%)	0512	0.0015	0.0010	0.0008	0.0005	0.0003	5	1.55	46%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (%)	0105	0.0785	0.0018	0.0823	0.0053	0.0019	2	-0.71	2%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (%)	0043	0.0860	0.0020	0.0823	0.0053	0.0019	2	0.71	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0035	0.0410	0.0080	0.0669	0.0101	0.0026	10	-2.56	19%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0472	0.0600	0.0000	0.0669	0.0101	0.0026	10	-0.68	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0483	0.0603	0.0020	0.0669	0.0101	0.0026	10	-0.65	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0102	0.0605	0.0010	0.0669	0.0101	0.0026	10	-0.63	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0420	0.0647	0.0003	0.0669	0.0101	0.0026	10	-0.22	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0041	0.0685	0.0030	0.0669	0.0101	0.0026	10	0.16	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0096	0.0700	0.0000	0.0669	0.0101	0.0026	10	0.30	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0354	0.0760	0.0040	0.0669	0.0101	0.0026	10	0.90	7%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0049	0.0770	0.0080	0.0669	0.0101	0.0026	10	0.99	8%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (%)	0482	0.0800	0.0000	0.0669	0.0101	0.0026	10	1.29	10%	0
241.31	Acid Soluble Iron , ICP, test portion organic... (%)	0131	0.4250	0.0100			0.0100	1			0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (%)	0421	0.0692	0.0089	0.0717	0.0036	0.0065	2	-0.71	2%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (%)	0494	0.0743	0.0041	0.0717	0.0036	0.0065	2	0.71	2%	0
241.99	Acid Soluble Iron , Other (%)	0512	0.0260	0.0000	0.0435	0.0247	0.0006	2	-0.71	20%	0
241.99	Acid Soluble Iron , Other (%)	0389	0.0610	0.0011	0.0435	0.0247	0.0006	2	0.71	20%	0
251.30	Acid Soluble Lead , ICP (ppm)	0230	0.1745	0.1050	0.0435	0.0247	0.1050	1	5.30	151%	0
251.30	Acid Soluble Lead , ICP (ppm)	0368	0.0000	0.0000	0.0435	0.0247	0.1050	1	-1.76	50%	4
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0494	0.2561	0.0405	0.3598	0.1467	0.1832	2	-0.71	14%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0515	0.4635	0.3258	0.3598	0.1467	0.1832	2	0.71	14%	0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	0.2133	0.4265			0.4265	0			4
251.99	Acid Soluble Lead , Other (ppm)	0512	54.80	32.40			32.40	1			0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
261.00	Acid Soluble Manganese , AA, Mn2+ only (%)	0043	0.0031	0.0002			0.0002	1			0
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	0105	0.0033	0.0005			0.0005	1			0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0420	0.0026	0.0001	0.0028	0.0002	0.0000	5	-1.27	4%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0102	0.0027	0.0000	0.0028	0.0002	0.0000	5	-0.51	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0096	0.0028	0.0001	0.0028	0.0002	0.0000	5	-0.25	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0041	0.0030	0.0000	0.0028	0.0002	0.0000	5	1.02	4%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0354	0.0030	0.0000	0.0028	0.0002	0.0000	5	1.02	4%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (%)	0421	0.0026	0.0002	0.0029	0.0004	0.0002	2	-0.71	5%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (%)	0494	0.0032	0.0001	0.0029	0.0004	0.0002	2	0.71	5%	0
261.99	Acid Soluble Manganese , Other (%)	0389	0.0026	0.0004			0.0004	1			0
281.00	Acid Soluble Mercury , AA (ppm)	0230	0.0040	0.0000			0.0000	1			0
281.30	Acid Soluble Mercury , ICP (ppm)	0394	0.0585	0.0170	0.0029	0.0004	0.0170	1	143.03	967%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0000	0.0000	0.0029	0.0004	0.0170	1	-7.39	50%	4
281.99	Acid Soluble Mercury , Other (ppm)	0009	0.0000	0.0000			0.0000	0			4
289.30	Acid Soluble Molybdenum , ICP (ppm)	0035	4.605	0.8300	9.224	1.398	0.4883	7	-3.30	25%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0096	7.950	1.900	9.224	1.398	0.4883	7	-0.91	7%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0433	8.853	0.2340	9.224	1.398	0.4883	7	-0.27	2%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0102	9.418	0.2540	9.224	1.398	0.4883	7	0.14	1%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0230	10.10	0.0000	9.224	1.398	0.4883	7	0.63	5%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0368	10.35	0.1000	9.224	1.398	0.4883	7	0.81	6%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0394	10.55	0.1000	9.224	1.398	0.4883	7	0.95	7%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0234	78.50	5.000	9.224	1.398	0.4883	7	49.54	376%	1
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (ppm)	0515	7.784	0.2705	8.587	0.7202	0.2917	3	-1.11	5%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (ppm)	0037	8.800	0.2800	8.587	0.7202	0.2917	3	0.30	1%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (ppm)	0494	9.177	0.3245	8.587	0.7202	0.2917	3	0.82	3%	0
289.99	Acid Soluble Molybdenum , Other (ppm)	0515	7.647	0.6790	8.182	0.8398	0.8263	3	-0.64	3%	0
289.99	Acid Soluble Molybdenum , Other (ppm)	0506	7.750	0.5000	8.182	0.8398	0.8263	3	-0.51	3%	0
289.99	Acid Soluble Molybdenum , Other (ppm)	0220	9.150	1.300	8.182	0.8398	0.8263	3	1.15	6%	0
291.00	Acid Soluble Nickel , AA, test portion as in... (ppm)	0136	69.50	1.000			1.000	1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	21.15	9.100	57.62	4.811	2.769	9	-7.58	32%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	43.85	1.300	57.62	4.811	2.769	9	-2.86	12%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0394	47.80	0.8000	57.62	4.811	2.769	9	-2.04	9%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0102	58.07	2.485	57.62	4.811	2.769	9	0.09	0%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0368	58.45	0.3000	57.62	4.811	2.769	9	0.17	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0095	58.50	1.000	57.62	4.811	2.769	9	0.18	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0096	60.45	3.500	57.62	4.811	2.769	9	0.59	2%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0230	61.10	0.4000	57.62	4.811	2.769	9	0.72	3%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	67.57	6.040	57.62	4.811	2.769	9	2.07	9%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0027	55.78	1.158	58.71	2.639	1.401	4	-1.11	2%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0494	57.47	2.179	58.71	2.639	1.401	4	-0.47	1%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0515	59.77	1.976	58.71	2.639	1.401	4	0.40	1%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0037	61.82	0.2900	58.71	2.639	1.401	4	1.18	3%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	54.83	6.416			6.416	1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
291.99	Acid Soluble Nickel , Other (ppm)	0512	23.20	0.2000	49.23	17.87	2.800	4	-1.46	26%	0
291.99	Acid Soluble Nickel , Other (ppm)	0220	54.50	5.000	49.23	17.87	2.800	4	0.30	5%	0
291.99	Acid Soluble Nickel , Other (ppm)	0481	55.25	4.100	49.23	17.87	2.800	4	0.34	6%	0
291.99	Acid Soluble Nickel , Other (ppm)	0506	63.95	1.900	49.23	17.87	2.800	4	0.82	15%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0230	0.0000	0.0000	49.23	17.87	0.0000	0	-2.75	50%	4
301.30	Acid Soluble Selenium , ICP (ppm)	0368	0.0000	0.0000	49.23	17.87	0.0000	0	-2.75	50%	4
301.33	Acid Soluble Selenium , ICP, 2006.03 modifie... (ppm)	0515	0.6356	1.187			1.187	1			0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0515	0.5340	1.068			1.068	0			4
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0494	0.5072	0.0020	0.5286	0.0303	0.0040	2	-0.71	2%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0102	0.5500	0.0060	0.5286	0.0303	0.0040	2	0.71	2%	0
311.99	Sodium, Other (%)	0035	0.4585	0.0150	0.5140	0.0382	0.0095	4	-1.45	5%	0
311.99	Sodium, Other (%)	0482	0.5200	0.0000	0.5140	0.0382	0.0095	4	0.16	1%	0
311.99	Sodium, Other (%)	0096	0.5350	0.0100	0.5140	0.0382	0.0095	4	0.55	2%	0
311.99	Sodium, Other (%)	0354	0.5425	0.0130	0.5140	0.0382	0.0095	4	0.75	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0105	0.0067	0.0001	0.0071	0.0006	0.0008	2	-0.71	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0043	0.0075	0.0015	0.0071	0.0006	0.0008	2	0.71	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0481	52.35	0.1000	0.0071	0.0006	0.0008	2	92530.14	371227%	3
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0444	0.0048	0.0001	0.0078	0.0026	0.0008	17	-1.18	20%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0049	0.0049	0.0011	0.0078	0.0026	0.0008	17	-1.14	19%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0354	0.0055	0.0090	0.0078	0.0026	0.0008	17	-0.89	15%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0230	0.0056	0.0000	0.0078	0.0026	0.0008	17	-0.86	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0420	0.0057	0.0002	0.0078	0.0026	0.0008	17	-0.82	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0102	0.0060	0.0001	0.0078	0.0026	0.0008	17	-0.72	12%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0390	0.0068	0.0005	0.0078	0.0026	0.0008	17	-0.42	7%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0041	0.0070	0.0000	0.0078	0.0026	0.0008	17	-0.32	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0035	0.0075	0.0004	0.0078	0.0026	0.0008	17	-0.13	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0324	0.0075	0.0010	0.0078	0.0026	0.0008	17	-0.13	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0096	0.0097	0.0003	0.0078	0.0026	0.0008	17	0.69	12%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0095	0.0100	0.0000	0.0078	0.0026	0.0008	17	0.82	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0292	0.0100	0.0000	0.0078	0.0026	0.0008	17	0.82	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0472	0.0100	0.0000	0.0078	0.0026	0.0008	17	0.82	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0482	0.0100	0.0000	0.0078	0.0026	0.0008	17	0.82	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0433	0.0108	0.0006	0.0078	0.0026	0.0008	17	1.13	19%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0368	0.0619	0.0010	0.0078	0.0026	0.0008	17	20.63	345%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0055	42.95	3.300	0.0078	0.0026	0.0008	17	16388.04	273777%	3
321.31	Acid Soluble Zinc , ICP, test portion organi... (%)	0131	0.9150	0.0300			0.0300	1			0
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (%)	0394	64.65	1.500			1.500	0			3
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (%)	0027	0.0054	0.0000	0.0064	0.0008	0.0002	5	-1.36	8%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (%)	0421	0.0061	0.0002	0.0064	0.0008	0.0002	5	-0.44	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (%)	0515	0.0064	0.0001	0.0064	0.0008	0.0002	5	-0.11	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (%)	0037	0.0070	0.0003	0.0064	0.0008	0.0002	5	0.69	4%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (%)	0494	0.0074	0.0005	0.0064	0.0008	0.0002	5	1.22	7%	0
321.99	Acid Soluble Zinc , Other (%)	0389	0.0052	0.0001	0.0064	0.0009	0.0005	5	-1.33	10%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
321.99	Acid Soluble Zinc , Other (%)	0220	0.0059	0.0004	0.0064	0.0009	0.0005	5	-0.51	4%	0
321.99	Acid Soluble Zinc , Other (%)	0515	0.0063	0.0012	0.0064	0.0009	0.0005	5	-0.08	1%	0
321.99	Acid Soluble Zinc , Other (%)	0512	0.0070	0.0000	0.0064	0.0009	0.0005	5	0.68	5%	0
321.99	Acid Soluble Zinc , Other (%)	0506	0.0075	0.0010	0.0064	0.0009	0.0005	5	1.23	9%	0
325.30	Water Soluble Zinc , ICP (%)	0406	0.0000	0.0000			0.0000	0			4

Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or -2 and -3 (warning) and Green = Z < 2 and >-2 (OK at 95%). Flags indicate data usage: 0 = Used, 1 = rejected for duplicates too far apart, 2 = rejected as extreme outlier and a 4 flag indicates rejected due to 0 value submitted. Robust statistics not used if < 6 labs reporting, in this case the Z Scores are included for information only (Grey). An offset lab value with an astrix indicates that the value is lower than the Analyte value less the IA. Method or Analyte codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for the purpose of this Proficiency Testing program.