

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

# Methods: 126

Sample # 160311

### Statistical Summary

# Labs Reporting: 84

Grade 5-2-0

Issue Date : 04/30/2016

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
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	3	3	1.468	1.483	1.468		1.483	0.8564	101.05%		0.0280	3.78%
001.99	Ammoniacal Nitrogen, Other (%)	3	3	1.968	2.605	1.968		2.605	1.504	132.36%		0.0100	3.61%
003.10	Water Insoluble Nitrogen, Method 1 (%)	4	4	4.484	0.2082	4.484		0.2082	0.1041	4.64%		0.0685	3.19%
003.99	Water Insoluble Nitrogen, Other (%)	2	2	2.538	3.037								
005.00	Urea Nitrogen, Urease (as N) (%)	1		0.0000									
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	1		0.4850									
010.11	Total Nitrogen, Modified Comprehensive (5%)	7	7	5.300	0.2936	5.300	0.5144	0.3324	0.1256	6.27%	4.85%	0.1143	3.11%
010.12	Total Nitrogen, Salicylic (5%)	6	6	5.365	0.2097	5.365	0.5144	0.2378	0.0971	4.43%	4.79%	0.0781	3.11%
010.16	Total Nitrogen, Raney (5%)	1		5.340									
010.60	Total Nitrogen, Combustion (5%)	57	54	5.462	0.1371	5.471	0.5144	0.1138	0.0155	2.08%	4.70%	0.0542	3.10%
010.99	Total Nitrogen, Other (5%)	7	7	4.922	1.181	5.209	0.5144	0.5657	0.2138	10.86%	4.94%	0.0957	3.12%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ... (%)	7	7	4.106	0.9846	4.347		0.4669	0.1765	10.74%		0.0457	3.21%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	18	18	4.632	0.9005	4.768		0.5569	0.1313	11.68%		0.0668	3.16%
020.40	Total Phosphorus as P2O5, Automated (%)	5	5	4.860	0.4771	4.860		0.4771	0.2134	9.82%		0.4480	3.15%
020.50	Total Phosphorus as P2O5, ICP (%)	20	19	4.482	0.9272	4.715		0.4591	0.1053	9.74%		0.0869	3.17%
020.99	Total Phosphorus as P2O5, Other (%)	3	3	4.785	0.3300	4.785		0.3300	0.1905	6.90%		0.1433	3.16%
030.20	Citrate Insoluble Phosphorus as P2O5, Spectrophoto... (%)	3	3	0.5976	0.0501	0.5976		0.0501	0.0289	8.38%		0.0072	4.32%
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t... (%)	1		0.5400									
030.99	Citrate Insoluble Phosphorus as P2O5, Other (%)	1		3.550									
040.20	Indirect Available Phosphorus as P2O5, Spectrophot... (2%)	2	2	2.768	2.628								
040.40	Indirect Available Phosphorus as P2O5, Automated (2%)	1		4.755									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q... (2%)	4	4	4.054	0.0711	4.054	0.6700	0.0711	0.0356	1.75%	8.26%	0.0925	3.24%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q... (2%)	5	5	4.078	0.1195	4.078	0.6700	0.1195	0.0534	2.93%	8.21%	0.0960	3.24%
041.20	Direct Available Phosphorus as P2O5, Spectrophotom... (2%)	2	2	4.589	0.7224								
041.21	Direct Available Phosphorus as P2O5, Spectrophotom... (2%)	1		5.170									
041.40	Direct Available Phosphorus as P2O5, Automated (2%)	2	2	4.070	0.4101								
041.50	Direct Available Phosphorus as P2O5, ICP (2%)	6	6	4.335	0.2802	4.335	0.6700	0.3177	0.1297	7.33%	7.73%	0.2028	3.21%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (2%)	4	4	4.493	0.2162	4.493	0.6700	0.2162	0.1081	4.81%	7.46%	0.0893	3.19%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ... (2%)	12	11	4.236	0.2816	4.227	0.6700	0.2505	0.0755	5.93%	7.92%	0.0569	3.22%
041.99	Direct Available Phosphorus as P2O5, Other (2%)	2	2	4.690	0.7212								
048.20	Water Soluble Phosphorus as P2O5, Spectrophotometr... (%)	2	2	0.2415	0.2920								

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
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		0.3150									
048.99	Water Soluble Phosphorus as P2O5, Other (%)	1		1.190									
050.31	Soluble Potassium as K2O, AA (Citrate) (%)	1		0.3700									
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (%)	1		0.3750									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (%)	1		0.5050									
050.51	Soluble Potassium as K2O, ICP (Citrate) (%)	1		0.4700									
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (%)	1		0.3615									
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala... (%)	1		0.3600									
050.62	Soluble Potassium as K2O, Flame Photometric (Citra... (%)	1		0.4200									
050.99	Soluble Potassium as K2O, Other (%)	8	8	0.3715	0.0483	0.3715		0.0548	0.0194	14.75%		0.0255	4.64%
060.00	Water (Free), Vacuum Oven (%)	3	3	2.865	1.079	2.865		1.079	0.6230	37.67%		0.0833	3.41%
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours,... (%)	2	2	6.168	0.0460								
060.99	Water (Free), Other (%)	2	2	4.270	1.598								
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	1		1.971									
101.03	Acid Soluble Calcium, AA, 965.09, test portion 200... (%)	1		2.244									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	9	9	1.985	0.2617	1.957		0.1463	0.0488	7.47%		0.0806	3.62%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C (%)	1		1.524									
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (%)	3	3	1.957	0.0755	1.957		0.0755	0.0436	3.86%		0.0270	3.62%
101.99	Acid Soluble Calcium, Other (%)	2	2	2.475	0.3394								
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (%)	1		0.3920									
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2... (%)	1		0.5577									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (%)	10	9	0.4348	0.0398	0.4344		0.0441	0.0147	10.16%		0.0110	4.53%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A... (%)	1		0.3430									
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (%)	3	3	0.4303	0.0025	0.4303		0.0025	0.0014	0.57%		0.0088	4.54%
121.99	Acid Soluble Magnesium, Other (%)	1		0.4415									
143.99	Elemental Sulfur, Other (%)	3	3	1.403	0.1098	1.403		0.1098	0.0634	7.82%		0.0067	3.80%
148.07	Total Sulfur, ICP, test portion as in 2006.03 modi... (%)	6	6	1.317	0.5218	1.443		0.2684	0.1096	18.59%		0.0221	3.78%
148.99	Total Sulfur, Other (%)	5	5	1.207	0.5815	1.207		0.5815	0.2601	48.20%		0.0778	3.89%
151.00	Acid Soluble Arsenic , AA, test portion as in 2006... (ppm)	1		1.450									
151.30	Acid Soluble Arsenic , ICP (ppm)	6	6	1.855	0.7894	1.959		0.6406	0.2615	32.70%		0.1233	14.46%
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified w/9:3... (ppm)	3	2	3.456	0.7927	3.456		0.7927	0.5605	22.94%		1.337	13.27%
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	2	2	3.683	1.778								
151.99	Acid Soluble Arsenic , Other (ppm)	3	3	2.297	1.109	2.297		1.109	0.6401	48.27%		0.0733	14.12%
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (%)	4	4	0.3834	0.7448	0.3834		0.7448	0.3724	194.26%		0.0472	4.62%
165.99	Acid Soluble Boron , Other (%)	5	5	0.0061	0.0036	0.0061		0.0036	0.0016	59.71%		0.0007	8.62%
181.00	Acid Soluble Cadmium , AA, test portion as in 2006... (ppm)	1		1.750									
181.30	Acid Soluble Cadmium , ICP (ppm)	11	11	1.658	0.3008	1.658		0.3412	0.1029	20.58%		0.0931	14.83%
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9:3... (ppm)	3	3	1.799	0.8024	1.799		0.8024	0.4633	44.60%		0.3741	14.64%
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	2	1	1.760									
181.99	Acid Soluble Cadmium , Other (ppm)	3	3	1.722	0.2844	1.722		0.2844	0.1642	16.52%		0.0433	14.74%
190.99	Water Soluble Chlorine, Other (%)	1		0.0500									
191.30	Acid Soluble Chromium , ICP (ppm)	11	11	55.83	9.954	55.86		11.23	3.385	20.10%		1.053	8.73%

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191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9:...	4	4	75.04	19.76	75.04		19.76	9.878	26.32%		1.411	8.35%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	2	2	56.83	17.30								
191.99	Acid Soluble Chromium , Other (ppm)	5	5	56.27	7.900	56.27		7.900	3.533	14.04%		3.163	8.72%
202.30	Acid Soluble Cobalt , ICP (ppm)	10	10	10.07	3.364	10.07		3.815	1.206	37.88%		0.3560	11.30%
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3 ... (ppm)	4	4	55.07	79.46	55.07		79.46	39.73	144.30%		3.004	8.75%
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	2	2	11.31	4.564								
202.99	Acid Soluble Cobalt , Other (ppm)	3	3	8.467	1.179	8.467		1.179	0.6809	13.93%		0.8600	11.60%
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	4	4	0.0186	0.0107	0.0186		0.0106	0.0053	57.18%		0.0007	7.28%
221.30	Acid Soluble Copper , ICP, test portion inorganic ... (%)	16	15	0.0245	0.0032	0.0244		0.0034	0.0009	13.83%		0.0006	7.00%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-C (%)	1		0.0256									
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-C... (%)	5	5	0.7832	1.698	0.7832		1.698	0.7595	216.85%		0.0821	4.15%
221.99	Acid Soluble Copper , Other (%)	6	6	0.0258	0.0028	0.0258		0.0032	0.0013	12.41%		0.0001	6.94%
241.00	Acid Soluble Iron, AA, inorganic 965.09 (%)	1		2.312									
241.30	Acid Soluble Iron, ICP, test portion inorganic 965... (%)	10	9	2.178	0.1587	2.175		0.1740	0.0580	8.00%		0.0552	3.56%
241.32	Acid Soluble Iron, ICP, test portion 2006.03A-C (%)	1		2.532									
241.33	Acid Soluble Iron, ICP, test portion 2006.03A-C, w... (%)	4	4	5.894	7.190	5.894		7.190	3.595	121.99%		0.1903	3.06%
241.99	Acid Soluble Iron, Other (%)	1		22.80									
251.00	Acid Soluble Lead , AA, test portion as in 2006.03... (ppm)	2	2	36.00	2.121								
251.30	Acid Soluble Lead , ICP (ppm)	12	12	33.94	3.683	34.01		4.011	1.158	11.79%		0.9558	9.41%
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 HN... (ppm)	3	3	251.9	369.2	251.9		369.2	213.1	146.58%		38.08	6.96%
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	2	2	35.70	1.205								
251.99	Acid Soluble Lead , Other (ppm)	5	5	33.36	7.153	33.36		7.153	3.199	21.44%		3.016	9.44%
261.00	Acid Soluble Manganese , AA, Mn2+ only (%)	1		0.0967									
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	1		0.0888									
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (%)	6	6	0.0956	0.0121	0.0933		0.0078	0.0032	8.31%		0.0053	5.72%
261.31	Acid Soluble Manganese , ICP, test portion 972.02b (%)	1		0.0950									
261.32	Acid Soluble Manganese , ICP, test portion inorgan... (%)	2	2	0.0832	0.0096								
261.34	Acid Soluble Manganese , ICP, test portion 2006.03... (%)	1		0.0711									
261.35	Acid Soluble Manganese , ICP, test portion 2006.03... (%)	4	4	1.910	3.648	1.910		3.648	1.824	190.98%		0.0354	3.63%
261.99	Acid Soluble Manganese , Other (%)	1		0.0935									
281.30	Acid Soluble Mercury , ICP (ppm)	4	3	0.6733	0.2751	0.6733		0.2751	0.1588	40.85%		0.0333	16.98%
281.99	Acid Soluble Mercury , Other (ppm)	2	2	0.6925	0.2227								
289.30	Acid Soluble Molybdenum , ICP (ppm)	9	9	8.981	1.281	8.950		1.385	0.4615	15.47%		0.4124	11.50%
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w/... (ppm)	4	4	64.61	109.0	64.61		109.0	54.52	168.79%		12.27	8.54%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (ppm)	2	2	9.106	0.2464								
289.99	Acid Soluble Molybdenum , Other (ppm)	3	3	10.12	2.928	10.12		2.928	1.690	28.94%		0.6800	11.29%
291.00	Acid Soluble Nickel , AA, test portion as in 2006.... (ppm)	1		33.50									
291.30	Acid Soluble Nickel , ICP (ppm)	11	11	26.80	5.680	26.80		6.441	1.942	24.03%		0.6513	9.75%
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3 ... (ppm)	4	4	56.62	48.72	56.62		48.72	24.36	86.04%		4.834	8.71%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	2	2	26.90	5.307								
291.99	Acid Soluble Nickel , Other (ppm)	5	5	29.53	3.060	29.53		3.060	1.368	10.36%		3.502	9.61%
301.30	Acid Soluble Selenium , ICP (ppm)	4	4	3.398	2.905	3.398		2.905	1.453	85.52%		0.2450	13.31%

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301.33	Acid Soluble Selenium , ICP, 2006.03 modified w/9:...	3	2	1.833	1.672	1.833		1.672	1.183	91.26%		0.3250	14.60%
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	2	1	3.240									
301.99	Acid Soluble Selenium , Other (ppm)	3	3	3.977	1.190	3.977		1.190	0.6868	29.91%		0.0867	13.00%
311.32	Sodium, ICP, 2006.03 test portion (%)	2	2	0.0886	0.0192								
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test ... (%)	3	3	0.2114	0.2427	0.2114		0.2427	0.1401	114.79%		0.0057	5.05%
311.99	Sodium, Other (%)	5	5	0.1139	0.0745	0.1139		0.0744	0.0333	65.36%		0.0262	5.55%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	4	4	0.1441	0.0081	0.1441		0.0081	0.0041	5.62%		0.0057	5.35%
321.30	Acid Soluble Zinc , ICP, test portion inorganic 96...	19	18	0.1362	0.0121	0.1371		0.0115	0.0027	8.39%		0.0038	5.39%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C (%)	1		0.1339									
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, ... (%)	6	5	0.1416	0.0075	0.1416		0.0075	0.0034	5.33%		0.0051	5.37%
321.99	Acid Soluble Zinc , Other (%)	6	6	0.1224	0.0537	0.1390		0.0168	0.0069	12.10%		0.0046	5.38%

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 160311

Grade 5-2-0

### Method Precision Report

Issue Date : 04/30/2016

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 (5%)	7	6	5.293	0.3209	0.3177	0.0632	0.3239	6.00%	1.19%	6.12%	5.127
010.12	Total Nitrogen, Salicylic (5%)	6	6	5.365	0.2097	0.2031	0.0736	0.2160	3.79%	1.37%	4.03%	2.935
010.60	Total Nitrogen, Combustion (5%)	57	50	5.478	0.1040	0.0989	0.0458	0.1090	1.80%	0.84%	1.99%	2.377
010.99	Total Nitrogen, Other (5%)	7	6	5.351	0.3614	0.3579	0.0714	0.3649	6.69%	1.33%	6.82%	5.114
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium MolybdoP (%)	7	6	4.463	0.2983	0.2972	0.0365	0.2994	6.66%	0.82%	6.71%	8.200
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	18	17	4.817	0.4584	0.4559	0.0676	0.4608	9.46%	1.40%	9.57%	6.814
020.50	Total Phosphorus as P2O5, ICP (%)	20	16	4.725	0.4648	0.4635	0.0493	0.4661	9.81%	1.04%	9.87%	9.451
041.50	Direct Available Phosphorus as P2O5, ICP (2%)	6	6	4.335	0.2802	0.2438	0.1952	0.3123	5.62%	4.50%	7.21%	1.600
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (2%)	12	10	4.218	0.2901	0.2888	0.0391	0.2914	6.85%	0.93%	6.91%	7.458
050.99	Soluble Potassium as K2O, Other (%)	8	8	0.3715	0.0483	0.0449	0.0253	0.0515	12.08%	6.80%	13.87%	2.039
101.30	Acid Soluble Calcium, ICP, test portion inorganic 965.09 (%)	9	8	1.911	0.1493	0.1413	0.0682	0.1569	7.40%	3.57%	8.21%	2.302
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (%)	10	9	0.4348	0.0398	0.0391	0.0103	0.0404	8.99%	2.36%	9.30%	3.936
148.07	Total Sulfur, ICP, test portion as in 2006.03 modified w/9:3 HNO3:HCl (%)	6	5	1.524	0.1463	0.1453	0.0235	0.1472	9.54%	1.54%	9.66%	6.262
151.30	Acid Soluble Arsenic , ICP (ppm)	6	5	2.151	0.3491	0.3375	0.1261	0.3603	15.69%	5.86%	16.75%	2.858
181.30	Acid Soluble Cadmium , ICP (ppm)	11	11	1.658	0.3008	0.2958	0.0774	0.3058	17.85%	4.67%	18.45%	3.953
191.30	Acid Soluble Chromium , ICP (ppm)	11	11	55.83	9.954	9.932	0.9363	9.976	17.79%	1.68%	17.87%	10.65
202.30	Acid Soluble Cobalt , ICP (ppm)	10	9	9.802	3.452	3.448	0.2295	3.455	35.17%	2.34%	35.25%	15.06
221.30	Acid Soluble Copper , ICP, test portion inorganic 965.09 (%)	16	15	0.0245	0.0032	0.0032	0.0006	0.0032	12.88%	2.48%	13.11%	5.286
221.99	Acid Soluble Copper , Other (%)	6	6	0.0258	0.0028	0.0028	0.0001	0.0028	10.94%	0.35%	10.94%	30.89
241.30	Acid Soluble Iron, ICP, test portion inorganic 965.09 (%)	10	9	2.178	0.1587	0.1544	0.0521	0.1629	7.09%	2.39%	7.48%	3.130
251.30	Acid Soluble Lead , ICP (ppm)	12	11	33.82	3.838	3.813	0.6230	3.863	11.27%	1.84%	11.42%	6.201
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (%)	6	5	0.0910	0.0042	0.0038	0.0026	0.0046	4.19%	2.85%	5.06%	1.776
289.30	Acid Soluble Molybdenum , ICP (ppm)	9	9	8.981	1.281	1.250	0.3952	1.311	13.92%	4.40%	14.60%	3.318
291.30	Acid Soluble Nickel , ICP (ppm)	11	11	26.80	5.680	5.662	0.6404	5.698	21.13%	2.39%	21.26%	8.898
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (%)	19	18	0.1362	0.0121	0.0118	0.0036	0.0124	8.69%	2.67%	9.09%	3.399
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, w/dual acid (%)	6	5	0.1416	0.0075	0.0068	0.0045	0.0082	4.83%	3.18%	5.78%	1.821
321.99	Acid Soluble Zinc , Other (%)	6	5	0.1441	0.0092	0.0082	0.0059	0.0101	5.66%	4.11%	7.00%	1.702

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

# Methods: 126

Sample # 160311

Lab Values

# Labs Reporting: 84

Grade 5-2-0

Issue Date : 04/30/2016

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				
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0444	0.4500	0.0200	1.468	1.483	0.0280	3	-0.69	35%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0405	0.7840	0.0040	1.468	1.483	0.0280	3	-0.46	23%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0500	3.170	0.0600	1.468	1.483	0.0280	3	1.15	58%	0
001.99	Ammoniacal Nitrogen, Other (%)	0368	0.2400	0.0000	1.968	2.605	0.0100	3	-0.66	44%	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	0.7000	0.0000	1.968	2.605	0.0100	3	-0.49	32%	0
001.99	Ammoniacal Nitrogen, Other (%)	0503	4.965	0.0300	1.968	2.605	0.0100	3	1.15	76%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0029	4.239	0.0570	4.484	0.2082	0.0685	4	-1.18	3%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0220	4.465	0.1300	4.484	0.2082	0.0685	4	-0.09	0%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0027	4.485	0.0700	4.484	0.2082	0.0685	4	0.00	0%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0117	4.748	0.0170	4.484	0.2082	0.0685	4	1.27	3%	0
003.99	Water Insoluble Nitrogen, Other (%)	0519	0.3900	0.1200				2			0
003.99	Water Insoluble Nitrogen, Other (%)	0486	4.685	0.0700				2			0
005.00	Urea Nitrogen, Urease (as N) (%)	0368	0.0000	0.0000				0			4
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0444	0.4850	0.1500				1			0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0456	4.900*	0.2000	5.300	0.3324	0.1143	7	-1.13	4%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0510	5.005	0.0700	5.300	0.3324	0.1143	7	-0.83	3%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0114	5.275	0.0300	5.300	0.3324	0.1143	7	-0.07	0%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0220	5.345	0.4300	5.300	0.3324	0.1143	7	0.13	0%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0090	5.355	0.0100	5.300	0.3324	0.1143	7	0.16	1%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0105	5.420	0.0200	5.300	0.3324	0.1143	7	0.34	1%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0309	5.800	0.0400	5.300	0.3324	0.1143	7	1.41	5%	0
010.12	Total Nitrogen, Salicylic (5%)	0211	5.060	0.0600	5.365	0.2378	0.0781	6	-1.19	3%	0
010.12	Total Nitrogen, Salicylic (5%)	0397	5.255	0.1115	5.365	0.2378	0.0781	6	-0.43	1%	0
010.12	Total Nitrogen, Salicylic (5%)	0481	5.380	0.0200	5.365	0.2378	0.0781	6	0.06	0%	0
010.12	Total Nitrogen, Salicylic (5%)	0117	5.389	0.0670	5.365	0.2378	0.0781	6	0.09	0%	0
010.12	Total Nitrogen, Salicylic (5%)	0185	5.405	0.2100	5.365	0.2378	0.0781	6	0.16	0%	0
010.12	Total Nitrogen, Salicylic (5%)	0498	5.700	0.0000	5.365	0.2378	0.0781	6	1.31	3%	0
010.16	Total Nitrogen, Raney (5%)	0300	5.340	0.0400				1			0
010.60	Total Nitrogen, Combustion (5%)	0421	4.915*	0.0300	5.471	0.1138	0.0542	54	-4.89	5%	0
010.60	Total Nitrogen, Combustion (5%)	0042	5.100	0.0000	5.471	0.1138	0.0542	54	-3.26	3%	0
010.60	Total Nitrogen, Combustion (5%)	0023	5.265	0.0685	5.471	0.1138	0.0542	54	-1.81	2%	0
010.60	Total Nitrogen, Combustion (5%)	0136	5.280	0.1400	5.471	0.1138	0.0542	54	-1.68	2%	0
010.60	Total Nitrogen, Combustion (5%)	0041	5.300	0.0000	5.471	0.1138	0.0542	54	-1.50	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				
010.60	Total Nitrogen, Combustion (5%)	0035	5.350	0.1600	5.471	0.1138	0.0542	54	-1.06	1%	0
010.60	Total Nitrogen, Combustion (5%)	0451	5.351	0.1600	5.471	0.1138	0.0542	54	-1.05	1%	0
010.60	Total Nitrogen, Combustion (5%)	0356	5.360	0.0800	5.471	0.1138	0.0542	54	-0.98	1%	0
010.60	Total Nitrogen, Combustion (5%)	0027	5.380	0.0600	5.471	0.1138	0.0542	54	-0.80	1%	0
010.60	Total Nitrogen, Combustion (5%)	0095	5.390	0.0000	5.471	0.1138	0.0542	54	-0.71	1%	0
010.60	Total Nitrogen, Combustion (5%)	0389	5.395	0.0500	5.471	0.1138	0.0542	54	-0.67	1%	0
010.60	Total Nitrogen, Combustion (5%)	0233	5.399	0.0510	5.471	0.1138	0.0542	54	-0.64	1%	0
010.60	Total Nitrogen, Combustion (5%)	0486	5.400	0.0200	5.471	0.1138	0.0542	54	-0.62	1%	0
010.60	Total Nitrogen, Combustion (5%)	0516	5.400	0.0400	5.471	0.1138	0.0542	54	-0.62	1%	0
010.60	Total Nitrogen, Combustion (5%)	0368	5.403	0.2190	5.471	0.1138	0.0542	54	-0.60	1%	0
010.60	Total Nitrogen, Combustion (5%)	0034	5.408	0.0920	5.471	0.1138	0.0542	54	-0.55	1%	0
010.60	Total Nitrogen, Combustion (5%)	0043	5.410	0.0400	5.471	0.1138	0.0542	54	-0.54	1%	0
010.60	Total Nitrogen, Combustion (5%)	0521	5.410	0.0600	5.471	0.1138	0.0542	54	-0.54	1%	0
010.60	Total Nitrogen, Combustion (5%)	0485	5.420	0.0060	5.471	0.1138	0.0542	54	-0.45	0%	0
010.60	Total Nitrogen, Combustion (5%)	0234	5.425	0.0100	5.471	0.1138	0.0542	54	-0.40	0%	0
010.60	Total Nitrogen, Combustion (5%)	0405	5.430	0.0200	5.471	0.1138	0.0542	54	-0.36	0%	0
010.60	Total Nitrogen, Combustion (5%)	0354	5.435	0.0110	5.471	0.1138	0.0542	54	-0.32	0%	0
010.60	Total Nitrogen, Combustion (5%)	0402	5.435	0.0300	5.471	0.1138	0.0542	54	-0.32	0%	0
010.60	Total Nitrogen, Combustion (5%)	0324	5.440	0.1200	5.471	0.1138	0.0542	54	-0.27	0%	0
010.60	Total Nitrogen, Combustion (5%)	0483	5.445	0.0500	5.471	0.1138	0.0542	54	-0.23	0%	0
010.60	Total Nitrogen, Combustion (5%)	0009	5.450	0.1000	5.471	0.1138	0.0542	54	-0.18	0%	0
010.60	Total Nitrogen, Combustion (5%)	0481	5.450	0.0000	5.471	0.1138	0.0542	54	-0.18	0%	0
010.60	Total Nitrogen, Combustion (5%)	0177	5.464	0.0280	5.471	0.1138	0.0542	54	-0.06	0%	0
010.60	Total Nitrogen, Combustion (5%)	0390	5.465	0.0300	5.471	0.1138	0.0542	54	-0.05	0%	0
010.60	Total Nitrogen, Combustion (5%)	0105	5.470	0.0200	5.471	0.1138	0.0542	54	-0.01	0%	0
010.60	Total Nitrogen, Combustion (5%)	0073	5.475	0.0900	5.471	0.1138	0.0542	54	0.03	0%	0
010.60	Total Nitrogen, Combustion (5%)	0157	5.475	0.1100	5.471	0.1138	0.0542	54	0.03	0%	0
010.60	Total Nitrogen, Combustion (5%)	0452	5.475	0.0100	5.471	0.1138	0.0542	54	0.03	0%	0
010.60	Total Nitrogen, Combustion (5%)	0307	5.490	0.0200	5.471	0.1138	0.0542	54	0.17	0%	0
010.60	Total Nitrogen, Combustion (5%)	0377	5.500	0.0800	5.471	0.1138	0.0542	54	0.25	0%	0
010.60	Total Nitrogen, Combustion (5%)	0231	5.530	0.0400	5.471	0.1138	0.0542	54	0.52	1%	0
010.60	Total Nitrogen, Combustion (5%)	0292	5.530	0.0200	5.471	0.1138	0.0542	54	0.52	1%	0
010.60	Total Nitrogen, Combustion (5%)	0360	5.535	0.0500	5.471	0.1138	0.0542	54	0.56	1%	0
010.60	Total Nitrogen, Combustion (5%)	0457	5.540	0.0000	5.471	0.1138	0.0542	54	0.61	1%	0
010.60	Total Nitrogen, Combustion (5%)	0040	5.550	0.1000	5.471	0.1138	0.0542	54	0.69	1%	0
010.60	Total Nitrogen, Combustion (5%)	0096	5.550	0.0200	5.471	0.1138	0.0542	54	0.69	1%	0
010.60	Total Nitrogen, Combustion (5%)	0025	5.565	0.0100	5.471	0.1138	0.0542	54	0.83	1%	0
010.60	Total Nitrogen, Combustion (5%)	0291	5.570	0.0200	5.471	0.1138	0.0542	54	0.87	1%	0
010.60	Total Nitrogen, Combustion (5%)	0422	5.575	0.0700	5.471	0.1138	0.0542	54	0.91	1%	0
010.60	Total Nitrogen, Combustion (5%)	0472	5.580	0.0000	5.471	0.1138	0.0542	54	0.96	1%	0
010.60	Total Nitrogen, Combustion (5%)	0325	5.595	0.0700	5.471	0.1138	0.0542	54	1.09	1%	0
010.60	Total Nitrogen, Combustion (5%)	0450	5.600	0.2000	5.471	0.1138	0.0542	54	1.13	1%	0
010.60	Total Nitrogen, Combustion (5%)	0131	5.605	0.0695	5.471	0.1138	0.0542	54	1.18	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				
010.60	Total Nitrogen, Combustion (5%)	0482	5.615	0.0100	5.471	0.1138	0.0542	54	1.27	1%	0
010.60	Total Nitrogen, Combustion (5%)	0055	5.630	0.0600	5.471	0.1138	0.0542	54	1.40	1%	0
010.60	Total Nitrogen, Combustion (5%)	0230	5.640	0.1000	5.471	0.1138	0.0542	54	1.49	2%	0
010.60	Total Nitrogen, Combustion (5%)	0406	5.650	0.0200	5.471	0.1138	0.0542	54	1.57	2%	0
010.60	Total Nitrogen, Combustion (5%)	0029	5.693	0.0340	5.471	0.1138	0.0542	54	1.95	2%	0
010.60	Total Nitrogen, Combustion (5%)	0260	5.725	0.0300	5.471	0.1138	0.0542	54	2.23	2%	0
010.60	Total Nitrogen, Combustion (5%)	0007	5.600	0.4000	5.471	0.1138	0.0542	54	1.13	1%	1
010.60	Total Nitrogen, Combustion (5%)	0102	5.625	0.4500	5.471	0.1138	0.0542	54	1.35	1%	1
010.60	Total Nitrogen, Combustion (5%)	0444	1.540*	0.0200	5.471	0.1138	0.0542	54	-34.55	36%	2
010.99	Total Nitrogen, Other (5%)	0506	2.350*	0.1200	5.209	0.5657	0.0957	7	-4.73	27%	0
010.99	Total Nitrogen, Other (5%)	0487	4.850*	0.1000	5.209	0.5657	0.0957	7	-0.59	3%	0
010.99	Total Nitrogen, Other (5%)	0513	5.060	0.0800	5.209	0.5657	0.0957	7	-0.25	1%	0
010.99	Total Nitrogen, Other (5%)	0420	5.405	0.1700	5.209	0.5657	0.0957	7	0.32	2%	0
010.99	Total Nitrogen, Other (5%)	0508	5.445	0.0300	5.209	0.5657	0.0957	7	0.39	2%	0
010.99	Total Nitrogen, Other (5%)	0493	5.450	0.1000	5.209	0.5657	0.0957	7	0.40	2%	0
010.99	Total Nitrogen, Other (5%)	0520	5.895	0.0700	5.209	0.5657	0.0957	7	1.13	7%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0114	1.960	0.0400	4.347	0.4669	0.0457	7	-4.78	27%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0211	4.140	0.0400	4.347	0.4669	0.0457	7	-0.41	2%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0500	4.250	0.0600	4.347	0.4669	0.0457	7	-0.19	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0090	4.315	0.0300	4.347	0.4669	0.0457	7	-0.06	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0157	4.425	0.0700	4.347	0.4669	0.0457	7	0.16	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0444	4.755	0.0100	4.347	0.4669	0.0457	7	0.82	5%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0105	4.895	0.0700	4.347	0.4669	0.0457	7	1.10	6%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0220	1.495	0.1500	4.768	0.5569	0.0668	18	-5.88	34%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0503	4.185	0.0300	4.768	0.5569	0.0668	18	-1.05	6%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0450	4.305	0.0900	4.768	0.5569	0.0668	18	-0.83	5%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0457	4.340	0.0000	4.768	0.5569	0.0668	18	-0.77	4%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0481	4.355	0.0300	4.768	0.5569	0.0668	18	-0.74	4%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	4.375	0.0100	4.768	0.5569	0.0668	18	-0.71	4%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	4.425	0.0500	4.768	0.5569	0.0668	18	-0.62	4%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0177	4.438	0.2415	4.768	0.5569	0.0668	18	-0.59	3%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0420	4.735	0.1300	4.768	0.5569	0.0668	18	-0.06	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	4.855	0.0500	4.768	0.5569	0.0668	18	0.16	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0428	4.927	0.0363	4.768	0.5569	0.0668	18	0.29	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	5.040	0.0000	4.768	0.5569	0.0668	18	0.49	3%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0516	5.110	0.0200	4.768	0.5569	0.0668	18	0.61	4%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0406	5.150	0.0200	4.768	0.5569	0.0668	18	0.69	4%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	5.260	0.2400	4.768	0.5569	0.0668	18	0.88	5%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	5.279	0.0240	4.768	0.5569	0.0668	18	0.92	5%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0506	5.535	0.0700	4.768	0.5569	0.0668	18	1.38	8%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	5.575	0.0100	4.768	0.5569	0.0668	18	1.45	8%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0042	4.350	0.1000	4.860	0.4771	0.4480	5	-1.07	5%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0456	4.350	0.1000	4.860	0.4771	0.4480	5	-1.07	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				
020.40	Total Phosphorus as P2O5, Automated (%)	0105	5.030	0.1200	4.860	0.4771	0.4480	5	0.36	2%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0035	5.275	1.910	4.860	0.4771	0.4480	5	0.87	4%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0096	5.295	0.0100	4.860	0.4771	0.4480	5	0.91	4%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0508	2.055	0.0100	4.715	0.4591	0.0869	19	-5.79	28%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	2.280	0.0000	4.715	0.4591	0.0869	19	-5.30	26%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0260	3.310	0.1200	4.715	0.4591	0.0869	19	-3.06	15%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	4.455	0.0100	4.715	0.4591	0.0869	19	-0.57	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0307	4.490	0.0570	4.715	0.4591	0.0869	19	-0.49	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0291	4.500	0.0000	4.715	0.4591	0.0869	19	-0.47	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	4.585	0.0500	4.715	0.4591	0.0869	19	-0.28	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0368	4.586	0.0640	4.715	0.4591	0.0869	19	-0.28	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0521	4.603	0.0006	4.715	0.4591	0.0869	19	-0.24	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0402	4.775	0.0100	4.715	0.4591	0.0869	19	0.13	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0433	4.825	0.0500	4.715	0.4591	0.0869	19	0.24	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	4.890	0.1200	4.715	0.4591	0.0869	19	0.38	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0421	4.915	0.0100	4.715	0.4591	0.0869	19	0.44	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0157	5.010	0.0400	4.715	0.4591	0.0869	19	0.64	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0231	5.015	0.0100	4.715	0.4591	0.0869	19	0.65	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	5.045	0.0300	4.715	0.4591	0.0869	19	0.72	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	5.215	0.1700	4.715	0.4591	0.0869	19	1.09	5%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0422	5.225	0.8300	4.715	0.4591	0.0869	19	1.11	5%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	5.375	0.0700	4.715	0.4591	0.0869	19	1.44	7%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0390	6.645	1.150	4.715	0.4591	0.0869	19	4.20	20%	1
020.99	Total Phosphorus as P2O5, Other (%)	0519	4.405	0.2100	4.785	0.3300	0.1433	3	-1.15	4%	0
020.99	Total Phosphorus as P2O5, Other (%)	0487	4.950	0.1000	4.785	0.3300	0.1433	3	0.50	2%	0
020.99	Total Phosphorus as P2O5, Other (%)	0520	5.000	0.1200	4.785	0.3300	0.1433	3	0.65	2%	0
030.20	Citrate Insoluble Phosphorus as P2O5, Spectro... (%)	0503	0.5550	0.0100	0.5976	0.0501	0.0072	3	-0.85	4%	0
030.20	Citrate Insoluble Phosphorus as P2O5, Spectro... (%)	0220	0.5850	0.0100	0.5976	0.0501	0.0072	3	-0.25	1%	0
030.20	Citrate Insoluble Phosphorus as P2O5, Spectro... (%)	0405	0.6528	0.0016	0.5976	0.0501	0.0072	3	1.10	5%	0
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	0.5400	0.0000				1			0
030.99	Citrate Insoluble Phosphorus as P2O5, Other (%)	0519	3.550	0.1400				1			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (2%)	0220	.9100*	0.1400				2			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (2%)	0405	4.626	0.0256				2			0
040.40	Indirect Available Phosphorus as P2O5, Automa... (2%)	0096	4.755	0.0100				1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0009	4.000	0.0000	4.054	0.0711	0.0925	4	-0.76	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0102	4.000	0.0000	4.054	0.0711	0.0925	4	-0.76	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0041	4.065	0.0700	4.054	0.0711	0.0925	4	0.16	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0040	4.150	0.3000	4.054	0.0711	0.0925	4	1.35	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0185	3.915	0.0700	4.078	0.1195	0.0960	5	-1.36	2%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0485	4.010	0.0600	4.078	0.1195	0.0960	5	-0.57	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0493	4.100	0.1000	4.078	0.1195	0.0960	5	0.18	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0055	4.140	0.1600	4.078	0.1195	0.0960	5	0.52	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (2%)	0105	4.225	0.0900	4.078	0.1195	0.0960	5	1.23	2%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
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041.20	Direct Available Phosphorus as P2O5, Spectrop... (2%)	0397	4.078	0.0234				2			0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (2%)	0498	5.100	0.2000				2			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (2%)	0055	5.170	0.0000				1			0
041.40	Direct Available Phosphorus as P2O5, Automate... (2%)	0095	3.780	0.1000				2			0
041.40	Direct Available Phosphorus as P2O5, Automate... (2%)	0131	4.360	0.0400				2			0
041.50	Direct Available Phosphorus as P2O5, ICP (2%)	0325	4.000	0.0000	4.335	0.3177	0.2028	6	-0.98	4%	0
041.50	Direct Available Phosphorus as P2O5, ICP (2%)	0007	4.100	0.4000	4.335	0.3177	0.2028	6	-0.68	3%	0
041.50	Direct Available Phosphorus as P2O5, ICP (2%)	0368	4.168	0.1565	4.335	0.3177	0.2028	6	-0.49	2%	0
041.50	Direct Available Phosphorus as P2O5, ICP (2%)	0231	4.475	0.1500	4.335	0.3177	0.2028	6	0.41	2%	0
041.50	Direct Available Phosphorus as P2O5, ICP (2%)	0452	4.615	0.0100	4.335	0.3177	0.2028	6	0.82	3%	0
041.50	Direct Available Phosphorus as P2O5, ICP (2%)	0040	4.650	0.5000	4.335	0.3177	0.2028	6	0.92	4%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (2%)	0377	4.355	0.0500	4.493	0.2162	0.0893	4	-0.64	2%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (2%)	0025	4.383	0.0170	4.493	0.2162	0.0893	4	-0.51	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (2%)	0360	4.420	0.1600	4.493	0.2162	0.0893	4	-0.34	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (2%)	0023	4.815	0.1300	4.493	0.2162	0.0893	4	1.49	4%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0472	3.735	0.0300	4.227	0.2505	0.0569	11	-1.97	6%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0043	4.030	0.0200	4.227	0.2505	0.0569	11	-0.79	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0117	4.085	0.0100	4.227	0.2505	0.0569	11	-0.57	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0136	4.100	0.0400	4.227	0.2505	0.0569	11	-0.51	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0034	4.144	0.0100	4.227	0.2505	0.0569	11	-0.33	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0073	4.180	0.1000	4.227	0.2505	0.0569	11	-0.19	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0029	4.225	0.0700	4.227	0.2505	0.0569	11	-0.01	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0354	4.406	0.0060	4.227	0.2505	0.0569	11	0.71	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0231	4.415	0.2100	4.227	0.2505	0.0569	11	0.75	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0486	4.460	0.0200	4.227	0.2505	0.0569	11	0.93	3%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0105	4.815	0.1100	4.227	0.2505	0.0569	11	2.35	7%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (2%)	0230	2.795*	0.3700	4.227	0.2505	0.0569	11	-5.72	17%	1
041.99	Direct Available Phosphorus as P2O5, Other (2%)	0105	4.180	0.0600				2			0
041.99	Direct Available Phosphorus as P2O5, Other (2%)	0506	5.200	0.2000				2			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0503	0.0350	0.0100				2			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0405	0.4480	0.0100				2			0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	0.3150	0.0100				1			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0519	1.190	0.0800				1			0
050.31	Soluble Potassium as K2O, AA (Citrate) (%)	0472	0.3700	0.0000				1			0
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (%)	0185	0.3750	0.0300				1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (%)	0292	0.5050	0.0100				1			0
050.51	Soluble Potassium as K2O, ICP (Citrate) (%)	0483	0.4700	0.0200				1			0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (%)	0354	0.3615	0.0050				1			0
050.60	Soluble Potassium as K2O, Flame Photometric (... (%)	0105	0.3600	0.0000				1			0
050.62	Soluble Potassium as K2O, Flame Photometric (... (%)	0105	0.4200	0.0200				1			0
050.99	Soluble Potassium as K2O, Other (%)	0503	0.2950	0.0100	0.3715	0.0548	0.0255	8	-1.32	10%	0
050.99	Soluble Potassium as K2O, Other (%)	0521	0.3069	0.0002	0.3715	0.0548	0.0255	8	-1.11	9%	0
050.99	Soluble Potassium as K2O, Other (%)	0105	0.3600	0.0200	0.3715	0.0548	0.0255	8	-0.20	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				
050.99	Soluble Potassium as K2O, Other (%)	0421	0.3750	0.0500	0.3715	0.0548	0.0255	8	0.06	0%	0
050.99	Soluble Potassium as K2O, Other (%)	0096	0.4000	0.0600	0.3715	0.0548	0.0255	8	0.49	4%	0
050.99	Soluble Potassium as K2O, Other (%)	0325	0.4000	0.0000	0.3715	0.0548	0.0255	8	0.49	4%	0
050.99	Soluble Potassium as K2O, Other (%)	0389	0.4050	0.0040	0.3715	0.0548	0.0255	8	0.58	5%	0
050.99	Soluble Potassium as K2O, Other (%)	0482	0.4300	0.0600	0.3715	0.0548	0.0255	8	1.01	8%	0
060.00	Water (Free), Vacuum Oven (%)	0007	2.055	0.0100	2.865	1.079	0.0833	3	-0.75	14%	0
060.00	Water (Free), Vacuum Oven (%)	0456	2.450	0.1000	2.865	1.079	0.0833	3	-0.38	7%	0
060.00	Water (Free), Vacuum Oven (%)	0096	4.090	0.1400	2.865	1.079	0.0833	3	1.14	21%	0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 h... (%)	0503	6.135	0.0100				2			0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 h... (%)	0055	6.200	0.0000				2			0
060.99	Water (Free), Other (%)	0510	3.140	0.0000				2			0
060.99	Water (Free), Other (%)	0513	5.400	0.0400				2			0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0105	1.971	0.0790				1			0
101.03	Acid Soluble Calcium, AA, 965.09, test portio... (%)	0086	2.244	0.0144				1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0307	1.588	0.2420	1.957	0.1463	0.0806	9	-2.39	9%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0035	1.860	0.0600	1.957	0.1463	0.0806	9	-0.63	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0503	1.870	0.0200	1.957	0.1463	0.0806	9	-0.56	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	1.900	0.0000	1.957	0.1463	0.0806	9	-0.37	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	1.995	0.0530	1.957	0.1463	0.0806	9	0.24	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0472	1.995	0.0100	1.957	0.1463	0.0806	9	0.25	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0102	2.035	0.0800	1.957	0.1463	0.0806	9	0.51	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	2.045	0.0500	1.957	0.1463	0.0806	9	0.57	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	2.575	0.2100	1.957	0.1463	0.0806	9	4.01	16%	0
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0521	1.524	0.0002				1			0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0421	1.870	0.0200	1.957	0.0755	0.0270	3	-1.15	2%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0034	1.998	0.0420	1.957	0.0755	0.0270	3	0.54	1%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0025	2.004	0.0190	1.957	0.0755	0.0270	3	0.61	1%	0
101.99	Acid Soluble Calcium, Other (%)	0389	2.235	0.0100				2			0
101.99	Acid Soluble Calcium, Other (%)	0390	2.715	0.4100				2			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (%)	0105	0.3920	0.0208				1			0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (%)	0086	0.5577	0.0045				1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0307	0.3820	0.0180	0.4344	0.0441	0.0110	9	-1.13	6%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0503	0.3900	0.0000	0.4344	0.0441	0.0110	9	-0.95	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0482	0.4050	0.0300	0.4344	0.0441	0.0110	9	-0.63	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0035	0.4315	0.0130	0.4344	0.0441	0.0110	9	-0.06	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0354	0.4325	0.0090	0.4344	0.0441	0.0110	9	-0.04	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0472	0.4350	0.0100	0.4344	0.0441	0.0110	9	0.01	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0096	0.4600	0.0000	0.4344	0.0441	0.0110	9	0.55	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0102	0.4730	0.0180	0.4344	0.0441	0.0110	9	0.83	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0483	0.5045	0.0010	0.4344	0.0441	0.0110	9	1.51	8%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0390	0.5930	0.1040	0.4344	0.0441	0.0110	9	3.41	18%	1
121.32	Acid Soluble Magnesium, ICP, test portion 200... (%)	0521	0.3430	0.0001				1			0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0034	0.4280	0.0140	0.4303	0.0025	0.0088	3	-0.93	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				
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0421	0.4300	0.0000	0.4303	0.0025	0.0088	3	-0.12	0%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0025	0.4329	0.0124	0.4303	0.0025	0.0088	3	1.06	0%	0
121.99	Acid Soluble Magnesium, Other (%)	0389	0.4415	0.0070				1			0
143.99	Elemental Sulfur, Other (%)	0503	1.335	0.0100	1.403	0.1098	0.0067	3	-0.62	2%	0
143.99	Elemental Sulfur, Other (%)	0472	1.345	0.0100	1.403	0.1098	0.0067	3	-0.53	2%	0
143.99	Elemental Sulfur, Other (%)	0389	1.530	0.0000	1.403	0.1098	0.0067	3	1.15	5%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0086	0.2863	0.0174	1.443	0.2684	0.0221	6	-3.99	40%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0292	1.400	0.0000	1.443	0.2684	0.0221	6	-0.15	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0483	1.450	0.0200	1.443	0.2684	0.0221	6	0.02	0%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0421	1.485	0.0300	1.443	0.2684	0.0221	6	0.14	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0102	1.509	0.0650	1.443	0.2684	0.0221	6	0.23	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0521	1.775	0.0002	1.443	0.2684	0.0221	6	1.14	11%	0
148.99	Total Sulfur, Other (%)	0096	0.6210	0.0180	1.207	0.5815	0.0778	5	-1.01	24%	0
148.99	Total Sulfur, Other (%)	0354	0.6600	0.0120	1.207	0.5815	0.0778	5	-0.94	23%	0
148.99	Total Sulfur, Other (%)	0307	1.202	0.0390	1.207	0.5815	0.0778	5	-0.01	0%	0
148.99	Total Sulfur, Other (%)	0482	1.595	0.0100	1.207	0.5815	0.0778	5	0.67	16%	0
148.99	Total Sulfur, Other (%)	0390	1.955	0.3100	1.207	0.5815	0.0778	5	1.29	31%	0
151.00	Acid Soluble Arsenic , AA, test portion as in... (ppm)	0136	1.450	0.5000				1			0
151.30	Acid Soluble Arsenic , ICP (ppm)	0486	0.3750	0.0100	1.959	0.6406	0.1233	6	-2.29	40%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0096	1.800	0.0000	1.959	0.6406	0.1233	6	-0.23	4%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0519	1.905	0.1500	1.959	0.6406	0.1233	6	-0.08	1%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0450	2.000	0.2000	1.959	0.6406	0.1233	6	0.06	1%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0520	2.500	0.0800	1.959	0.6406	0.1233	6	0.78	14%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0368	2.550	0.3000	1.959	0.6406	0.1233	6	0.85	15%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0037	2.895	0.4700				2			0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0515	4.016	2.204				2			0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0009	0.3000	0.6000				2			4
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0230	2.425	0.1700				2			0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	4.940	1.724				2			0
151.99	Acid Soluble Arsenic , Other (ppm)	0481	1.080	0.0600	2.297	1.109	0.0733	3	-1.10	26%	0
151.99	Acid Soluble Arsenic , Other (ppm)	0042	2.560	0.0600	2.297	1.109	0.0733	3	0.24	6%	0
151.99	Acid Soluble Arsenic , Other (ppm)	0220	3.250	0.1000	2.297	1.109	0.0733	3	0.86	21%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (%)	0389	0.0032	0.0001	0.3834	0.7448	0.0472	4	-0.51	50%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (%)	0521	0.0035	0.0000	0.3834	0.7448	0.0472	4	-0.51	50%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (%)	0354	0.0265	0.0070	0.3834	0.7448	0.0472	4	-0.48	47%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (%)	0086	1.500	0.1815	0.3834	0.7448	0.0472	4	1.50	146%	0
165.99	Acid Soluble Boron , Other (%)	0009	0.0027	0.0000	0.0061	0.0036	0.0007	5	-0.93	28%	0
165.99	Acid Soluble Boron , Other (%)	0421	0.0035	0.0030	0.0061	0.0036	0.0007	5	-0.71	21%	0
165.99	Acid Soluble Boron , Other (%)	0483	0.0042	0.0003	0.0061	0.0036	0.0007	5	-0.53	16%	0
165.99	Acid Soluble Boron , Other (%)	0472	0.0100	0.0000	0.0061	0.0036	0.0007	5	1.08	32%	0
165.99	Acid Soluble Boron , Other (%)	0482	0.0100	0.0000	0.0061	0.0036	0.0007	5	1.08	32%	0
181.00	Acid Soluble Cadmium , AA, test portion as in... (ppm)	0136	1.750	0.1000				1			0
181.30	Acid Soluble Cadmium , ICP (ppm)	0486	1.250	0.0600	1.658	0.3412	0.0931	11	-1.14	12%	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				
181.30	Acid Soluble Cadmium , ICP (ppm)	0520	1.310	0.0600	1.658	0.3412	0.0931	11	-0.98	10%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0519	1.345	0.0700	1.658	0.3412	0.0931	11	-0.88	9%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0444	1.515	0.0500	1.658	0.3412	0.0931	11	-0.40	4%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0482	1.550	0.1000	1.658	0.3412	0.0931	11	-0.30	3%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0035	1.620	0.1000	1.658	0.3412	0.0931	11	-0.11	1%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0450	1.700	0.0000	1.658	0.3412	0.0931	11	0.12	1%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0102	1.793	0.0840	1.658	0.3412	0.0931	11	0.38	4%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0096	2.000	0.2000	1.658	0.3412	0.0931	11	0.96	10%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0368	2.050	0.1000	1.658	0.3412	0.0931	11	1.10	12%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	2.100	0.2000	1.658	0.3412	0.0931	11	1.24	13%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0009	0.9000	0.0000	1.799	0.8024	0.3741	3	-1.12	25%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0037	2.055	0.0100	1.799	0.8024	0.3741	3	0.32	7%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0515	2.442	1.112	1.799	0.8024	0.3741	3	0.80	18%	0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0230	1.760	0.0200				1			0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	0.5080	1.016				1			4
181.99	Acid Soluble Cadmium , Other (ppm)	0481	1.555	0.0100	1.722	0.2844	0.0433	3	-0.59	5%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0042	1.560	0.0200	1.722	0.2844	0.0433	3	-0.57	5%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0220	2.050	0.1000	1.722	0.2844	0.0433	3	1.15	10%	0
190.99	Water Soluble Chlorine, Other (%)	0009	0.0500	0.1000				0			4
191.30	Acid Soluble Chromium , ICP (ppm)	0486	38.70	1.600	55.86	11.23	1.053	11	-1.46	15%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0520	39.18	0.2100	55.86	11.23	1.053	11	-1.42	15%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0519	49.46	2.710	55.86	11.23	1.053	11	-0.55	6%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	55.35	0.5000	55.86	11.23	1.053	11	-0.04	0%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0450	55.50	1.000	55.86	11.23	1.053	11	-0.03	0%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	57.90	1.000	55.86	11.23	1.053	11	0.17	2%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0368	59.50	0.4000	55.86	11.23	1.053	11	0.31	3%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0444	60.01	0.7000	55.86	11.23	1.053	11	0.35	4%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0102	62.26	2.364	55.86	11.23	1.053	11	0.55	6%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	67.95	0.9000	55.86	11.23	1.053	11	1.03	11%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	68.30	0.2000	55.86	11.23	1.053	11	1.06	11%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0009	63.00	0.0000	75.04	19.76	1.411	4	-0.61	8%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0515	63.02	2.043	75.04	19.76	1.411	4	-0.61	8%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0037	69.88	0.8900	75.04	19.76	1.411	4	-0.26	3%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0086	104.3	2.710	75.04	19.76	1.411	4	1.48	19%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	0230	44.60	7.600				2			0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	0515	69.06	4.405				2			0
191.99	Acid Soluble Chromium , Other (ppm)	0506	45.25	5.500	56.27	7.900	3.163	5	-1.39	10%	0
191.99	Acid Soluble Chromium , Other (ppm)	0220	53.50	1.000	56.27	7.900	3.163	5	-0.35	2%	0
191.99	Acid Soluble Chromium , Other (ppm)	0042	54.71	1.580	56.27	7.900	3.163	5	-0.20	1%	0
191.99	Acid Soluble Chromium , Other (ppm)	0027	63.37	6.733	56.27	7.900	3.163	5	0.90	6%	0
191.99	Acid Soluble Chromium , Other (ppm)	0481	64.50	1.000	56.27	7.900	3.163	5	1.04	7%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0486	5.850	0.5000	10.07	3.815	0.3560	10	-1.06	21%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0519	5.920	0.0600	10.07	3.815	0.3560	10	-1.04	21%	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				
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	7.575	0.1900	10.07	3.815	0.3560	10	-0.62	12%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0520	7.655	0.1500	10.07	3.815	0.3560	10	-0.60	12%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0102	8.921	0.6600	10.07	3.815	0.3560	10	-0.29	6%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0368	10.45	0.1000	10.07	3.815	0.3560	10	0.09	2%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0035	12.50	1.200	10.07	3.815	0.3560	10	0.61	12%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0450	13.15	0.3000	10.07	3.815	0.3560	10	0.77	15%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	13.55	0.1000	10.07	3.815	0.3560	10	0.87	17%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	15.15	0.3000	10.07	3.815	0.3560	10	1.27	25%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0515	14.06	1.966	55.07	79.46	3.004	4	-0.52	37%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0037	15.97	0.3500	55.07	79.46	3.004	4	-0.49	36%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0009	16.00	0.0000	55.07	79.46	3.004	4	-0.49	35%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0086	174.3	9.700	55.07	79.46	3.004	4	1.50	108%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0230	8.080	1.340				2			0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	14.53	0.9640				2			0
202.99	Acid Soluble Cobalt , Other (ppm)	0042	7.350	0.6800	8.467	1.179	0.8600	3	-0.95	7%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0506	8.350	1.700	8.467	1.179	0.8600	3	-0.10	1%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0220	9.700	0.2000	8.467	1.179	0.8600	3	1.05	7%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0481	0.0027	0.0000	0.0186	0.0106	0.0007	4	-1.50	43%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0043	0.0228	0.0015	0.0186	0.0106	0.0007	4	0.39	11%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0498	0.0245	0.0010	0.0186	0.0106	0.0007	4	0.55	16%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0105	0.0246	0.0003	0.0186	0.0106	0.0007	4	0.56	16%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0472	0.0200	0.0000	0.0244	0.0034	0.0006	15	-1.30	9%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0519	0.0200	0.0000	0.0244	0.0034	0.0006	15	-1.30	9%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0520	0.0213	0.0003	0.0244	0.0034	0.0006	15	-0.93	6%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0450	0.0220	0.0000	0.0244	0.0034	0.0006	15	-0.70	5%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0486	0.0230	0.0020	0.0244	0.0034	0.0006	15	-0.41	3%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0230	0.0233	0.0002	0.0244	0.0034	0.0006	15	-0.32	2%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0354	0.0235	0.0010	0.0244	0.0034	0.0006	15	-0.26	2%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0433	0.0245	0.0008	0.0244	0.0034	0.0006	15	0.04	0%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0096	0.0246	0.0018	0.0244	0.0034	0.0006	15	0.07	0%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0035	0.0253	0.0001	0.0244	0.0034	0.0006	15	0.26	2%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0368	0.0255	0.0002	0.0244	0.0034	0.0006	15	0.34	2%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0444	0.0265	0.0010	0.0244	0.0034	0.0006	15	0.63	4%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0483	0.0273	0.0000	0.0244	0.0034	0.0006	15	0.87	6%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0482	0.0300	0.0000	0.0244	0.0034	0.0006	15	1.67	12%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0102	0.0305	0.0010	0.0244	0.0034	0.0006	15	1.82	13%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0402	0.0250	0.0100	0.0244	0.0034	0.0006	15	0.19	1%	1
221.32	Acid Soluble Copper , ICP, test portion 2006.... (%)	0521	0.0256	0.0000				1			0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0515	0.0216	0.0010	0.7832	1.698	0.0821	5	-0.45	49%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0009	0.0225	0.0010	0.7832	1.698	0.0821	5	-0.45	49%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0037	0.0251	0.0002	0.7832	1.698	0.0821	5	-0.45	48%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0421	0.0255	0.0010	0.7832	1.698	0.0821	5	-0.45	48%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0086	3.821	0.4075	0.7832	1.698	0.0821	5	1.79	194%	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				
221.99	Acid Soluble Copper , Other (%)	0515	0.0226	0.0002	0.0258	0.0032	0.0001	6	-0.92	6%	0
221.99	Acid Soluble Copper , Other (%)	0220	0.0238	0.0001	0.0258	0.0032	0.0001	6	-0.58	4%	0
221.99	Acid Soluble Copper , Other (%)	0042	0.0242	0.0002	0.0258	0.0032	0.0001	6	-0.45	3%	0
221.99	Acid Soluble Copper , Other (%)	0027	0.0260	0.0000	0.0258	0.0032	0.0001	6	0.07	0%	0
221.99	Acid Soluble Copper , Other (%)	0389	0.0281	0.0001	0.0258	0.0032	0.0001	6	0.66	4%	0
221.99	Acid Soluble Copper , Other (%)	0506	0.0300	0.0000	0.0258	0.0032	0.0001	6	1.23	8%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (%)	0105	2.312	0.1280				1			0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0503	1.980	0.0000	2.175	0.1740	0.0552	9	-1.06	4%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0402	2.015	0.0500	2.175	0.1740	0.0552	9	-0.87	4%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0035	2.045	0.0700	2.175	0.1740	0.0552	9	-0.71	3%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0472	2.080	0.0200	2.175	0.1740	0.0552	9	-0.52	2%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0102	2.207	0.1120	2.175	0.1740	0.0552	9	0.18	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0096	2.230	0.1600	2.175	0.1740	0.0552	9	0.30	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0354	2.281	0.0450	2.175	0.1740	0.0552	9	0.58	2%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0482	2.300	0.0200	2.175	0.1740	0.0552	9	0.68	3%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0483	2.460	0.0200	2.175	0.1740	0.0552	9	1.55	7%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0390	3.050	0.5600	2.175	0.1740	0.0552	9	4.77	20%	1
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0521	2.532	0.0000				1			0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0025	2.176	0.1340	5.894	7.190	0.1903	4	-0.52	32%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0034	2.287	0.0350	5.894	7.190	0.1903	4	-0.50	31%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0421	2.435	0.0100	5.894	7.190	0.1903	4	-0.48	29%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0086	16.68	0.5820	5.894	7.190	0.1903	4	1.50	91%	0
241.99	Acid Soluble Iron, Other (%)	0389	22.80	0.6000				1			0
251.00	Acid Soluble Lead , AA, test portion as in 20... (ppm)	0136	34.50	1.000				2			0
251.00	Acid Soluble Lead , AA, test portion as in 20... (ppm)	0009	37.50	3.000				2			0
251.30	Acid Soluble Lead , ICP (ppm)	0486	27.10	0.6000	34.01	4.011	0.9558	12	-1.72	10%	0
251.30	Acid Soluble Lead , ICP (ppm)	0519	28.24	0.9700	34.01	4.011	0.9558	12	-1.44	8%	0
251.30	Acid Soluble Lead , ICP (ppm)	0520	31.67	0.1400	34.01	4.011	0.9558	12	-0.58	3%	0
251.30	Acid Soluble Lead , ICP (ppm)	0035	33.35	0.3000	34.01	4.011	0.9558	12	-0.17	1%	0
251.30	Acid Soluble Lead , ICP (ppm)	0503	33.79	0.1800	34.01	4.011	0.9558	12	-0.06	0%	0
251.30	Acid Soluble Lead , ICP (ppm)	0368	34.20	1.000	34.01	4.011	0.9558	12	0.05	0%	0
251.30	Acid Soluble Lead , ICP (ppm)	0482	34.40	1.600	34.01	4.011	0.9558	12	0.10	1%	0
251.30	Acid Soluble Lead , ICP (ppm)	0450	35.15	0.7000	34.01	4.011	0.9558	12	0.28	2%	0
251.30	Acid Soluble Lead , ICP (ppm)	0096	35.25	3.300	34.01	4.011	0.9558	12	0.31	2%	0
251.30	Acid Soluble Lead , ICP (ppm)	0444	35.41	0.7600	34.01	4.011	0.9558	12	0.35	2%	0
251.30	Acid Soluble Lead , ICP (ppm)	0389	39.30	0.4000	34.01	4.011	0.9558	12	1.32	8%	0
251.30	Acid Soluble Lead , ICP (ppm)	0102	39.41	1.519	34.01	4.011	0.9558	12	1.35	8%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0037	35.98	0.1500	251.9	369.2	38.08	3	-0.58	43%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0515	41.46	8.133	251.9	369.2	38.08	3	-0.57	42%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0086	678.1	106.0	251.9	369.2	38.08	3	1.15	85%	0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0230	34.85	0.3000				2			0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	36.55	3.571				2			0
251.99	Acid Soluble Lead , Other (ppm)	0481	28.50	2.200	33.36	7.153	3.016	5	-0.68	7%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
251.99	Acid Soluble Lead , Other (ppm)	0506	29.25	8.500	33.36	7.153	3.016	5	-0.57	6%	0
251.99	Acid Soluble Lead , Other (ppm)	0042	29.35	1.300	33.36	7.153	3.016	5	-0.56	6%	0
251.99	Acid Soluble Lead , Other (ppm)	0027	34.18	0.0780	33.36	7.153	3.016	5	0.11	1%	0
251.99	Acid Soluble Lead , Other (ppm)	0220	45.50	3.000	33.36	7.153	3.016	5	1.70	18%	0
261.00	Acid Soluble Manganese , AA, Mn2+ only (%)	0043	0.0967	0.0030				1			0
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	0105	0.0888	0.0012				1			0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0035	0.0848	0.0030	0.0933	0.0078	0.0053	6	-1.01	5%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0472	0.0900	0.0000	0.0933	0.0078	0.0053	6	-0.39	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0354	0.0905	0.0070	0.0933	0.0078	0.0053	6	-0.33	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0102	0.0935	0.0030	0.0933	0.0078	0.0053	6	0.02	0%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0096	0.0961	0.0005	0.0933	0.0078	0.0053	6	0.33	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0390	0.1190	0.0180	0.0933	0.0078	0.0053	6	3.07	14%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (%)	0482	0.0950	0.0100				1			0
261.32	Acid Soluble Manganese , ICP, test portion in... (%)	0483	0.0765	0.0045				2			0
261.32	Acid Soluble Manganese , ICP, test portion in... (%)	0402	0.0900	0.0000				2			0
261.34	Acid Soluble Manganese , ICP, test portion 20... (%)	0521	0.0711	0.0001				1			0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0009	0.0820	0.0040	1.910	3.648	0.0354	4	-0.50	48%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0025	0.0871	0.0055	1.910	3.648	0.0354	4	-0.50	48%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0421	0.0895	0.0010	1.910	3.648	0.0354	4	-0.50	48%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0086	7.383	0.1310	1.910	3.648	0.0354	4	1.50	143%	0
261.99	Acid Soluble Manganese , Other (%)	0389	0.0935	0.0010				1			0
281.30	Acid Soluble Mercury , ICP (ppm)	0519	0.3600	0.0600	0.6733	0.2751	0.0333	3	-1.14	23%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0450	0.7850	0.0300	0.6733	0.2751	0.0333	3	0.41	8%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0520	0.8750	0.0100	0.6733	0.2751	0.0333	3	0.73	15%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0000	0.0000	0.6733	0.2751	0.0333	3	-2.45	50%	4
281.99	Acid Soluble Mercury , Other (ppm)	0486	0.5350	0.0700				2			0
281.99	Acid Soluble Mercury , Other (ppm)	0042	0.8500	0.0400				2			0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0486	7.200	0.4000	8.950	1.385	0.4124	9	-1.20	10%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0519	7.690	0.0200	8.950	1.385	0.4124	9	-0.86	7%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0433	8.507	0.1027	8.950	1.385	0.4124	9	-0.30	2%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0035	8.545	0.4700	8.950	1.385	0.4124	9	-0.28	2%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0521	8.617	0.0000	8.950	1.385	0.4124	9	-0.23	2%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0520	8.840	0.5600	8.950	1.385	0.4124	9	-0.08	1%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0102	10.03	0.1590	8.950	1.385	0.4124	9	0.74	6%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0450	10.10	0.8000	8.950	1.385	0.4124	9	0.79	6%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0368	11.30	1.200	8.950	1.385	0.4124	9	1.61	13%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0515	9.447	0.1635	64.61	109.0	12.27	4	-0.51	43%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0009	10.00	0.0000	64.61	109.0	12.27	4	-0.50	42%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0037	10.81	0.2700	64.61	109.0	12.27	4	-0.49	42%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0086	228.2	48.65	64.61	109.0	12.27	4	1.50	127%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (ppm)	0515	8.932	1.091				2			0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (ppm)	0230	9.280	0.5200				2			0
289.99	Acid Soluble Molybdenum , Other (ppm)	0220	7.450	0.3000	10.12	2.928	0.6800	3	-0.91	13%	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				
289.99	Acid Soluble Molybdenum , Other (ppm)	0042	9.650	0.2400	10.12	2.928	0.6800	3	-0.16	2%	0
289.99	Acid Soluble Molybdenum , Other (ppm)	0506	13.25	1.500	10.12	2.928	0.6800	3	1.07	15%	0
291.00	Acid Soluble Nickel , AA, test portion as in ... (ppm)	0136	33.50	3.000				1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0520	17.68	0.4600	26.80	6.441	0.6513	11	-1.36	17%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0486	17.95	1.100	26.80	6.441	0.6513	11	-1.32	17%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0519	20.99	0.1900	26.80	6.441	0.6513	11	-0.86	11%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	26.10	0.6000	26.80	6.441	0.6513	11	-0.10	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	26.95	0.3000	26.80	6.441	0.6513	11	0.02	0%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0450	27.00	0.0000	26.80	6.441	0.6513	11	0.03	0%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0368	29.80	1.200	26.80	6.441	0.6513	11	0.45	6%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0102	30.54	1.354	26.80	6.441	0.6513	11	0.55	7%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0521	31.81	0.0000	26.80	6.441	0.6513	11	0.74	9%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	32.12	1.960	26.80	6.441	0.6513	11	0.79	10%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0096	33.90	0.0000	26.80	6.441	0.6513	11	1.05	13%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0009	31.00	2.000	56.62	48.72	4.834	4	-0.53	23%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0037	32.12	0.2400	56.62	48.72	4.834	4	-0.50	22%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0515	33.68	8.222	56.62	48.72	4.834	4	-0.47	20%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0086	129.7	8.876	56.62	48.72	4.834	4	1.50	65%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0230	23.15	4.100				2			0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	30.66	2.440				2			0
291.99	Acid Soluble Nickel , Other (ppm)	0042	26.42	0.3500	29.53	3.060	3.502	5	-1.02	5%	0
291.99	Acid Soluble Nickel , Other (ppm)	0506	27.50	2.000	29.53	3.060	3.502	5	-0.66	3%	0
291.99	Acid Soluble Nickel , Other (ppm)	0220	28.10	0.4000	29.53	3.060	3.502	5	-0.47	2%	0
291.99	Acid Soluble Nickel , Other (ppm)	0027	32.62	2.761	29.53	3.060	3.502	5	1.01	5%	0
291.99	Acid Soluble Nickel , Other (ppm)	0481	33.00	12.00	29.53	3.060	3.502	5	1.13	6%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0503	0.4650	0.0300	3.398	2.905	0.2450	4	-1.01	43%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0520	2.605	0.1300	3.398	2.905	0.2450	4	-0.27	12%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0519	3.120	0.0200	3.398	2.905	0.2450	4	-0.10	4%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0368	7.400	0.8000	3.398	2.905	0.2450	4	1.38	59%	0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0009	0.6500	0.1000				2			0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0037	3.015	0.5500				2			0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0515	0.0000	0.0000				2			4
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	0230	3.240	1.060				1			0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				1			4
301.99	Acid Soluble Selenium , Other (ppm)	0481	3.150	0.1400	3.977	1.190	0.0867	3	-0.69	10%	0
301.99	Acid Soluble Selenium , Other (ppm)	0485	3.440	0.1200	3.977	1.190	0.0867	3	-0.45	7%	0
301.99	Acid Soluble Selenium , Other (ppm)	0042	5.340	0.0000	3.977	1.190	0.0867	3	1.15	17%	0
311.32	Sodium, ICP, 2006.03 test portion (%)	0025	0.0750	0.0040				2			0
311.32	Sodium, ICP, 2006.03 test portion (%)	0521	0.1021	0.0002				2			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0102	0.0682	0.0023	0.2114	0.2427	0.0057	3	-0.59	34%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0035	0.0745	0.0070	0.2114	0.2427	0.0057	3	-0.56	32%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0086	0.4917	0.0077	0.2114	0.2427	0.0057	3	1.15	66%	0
311.99	Sodium, Other (%)	0503	0.0600	0.0000	0.1139	0.0744	0.0262	5	-0.72	24%	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				
311.99	Sodium, Other (%)	0482	0.0650	0.0100	0.1139	0.0744	0.0262	5	-0.66	21%	0
311.99	Sodium, Other (%)	0096	0.0700	0.0000	0.1139	0.0744	0.0262	5	-0.59	19%	0
311.99	Sodium, Other (%)	0354	0.1415	0.0230	0.1139	0.0744	0.0262	5	0.37	12%	0
311.99	Sodium, Other (%)	0390	0.2330	0.0980	0.1139	0.0744	0.0262	5	1.60	52%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0105	0.1377	0.0004	0.1441	0.0081	0.0057	4	-0.79	2%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0481	0.1400	0.0000	0.1441	0.0081	0.0057	4	-0.51	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0498	0.1430	0.0000	0.1441	0.0081	0.0057	4	-0.14	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0043	0.1559	0.0223	0.1441	0.0081	0.0057	4	1.45	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0520	0.1076	0.0004	0.1371	0.0115	0.0038	18	-2.56	11%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0230	0.1160	0.0000	0.1371	0.0115	0.0038	18	-1.83	8%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0444	0.1215	0.0070	0.1371	0.0115	0.0038	18	-1.35	6%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0433	0.1296	0.0004	0.1371	0.0115	0.0038	18	-0.65	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0482	0.1300	0.0000	0.1371	0.0115	0.0038	18	-0.62	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0450	0.1315	0.0050	0.1371	0.0115	0.0038	18	-0.48	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0472	0.1350	0.0100	0.1371	0.0115	0.0038	18	-0.18	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0519	0.1350	0.0100	0.1371	0.0115	0.0038	18	-0.18	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0035	0.1385	0.0030	0.1371	0.0115	0.0038	18	0.12	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0486	0.1395	0.0050	0.1371	0.0115	0.0038	18	0.21	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0292	0.1400	0.0000	0.1371	0.0115	0.0038	18	0.25	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0368	0.1420	0.0040	0.1371	0.0115	0.0038	18	0.43	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0402	0.1435	0.0030	0.1371	0.0115	0.0038	18	0.56	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0354	0.1450	0.0040	0.1371	0.0115	0.0038	18	0.69	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0102	0.1465	0.0050	0.1371	0.0115	0.0038	18	0.82	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0420	0.1475	0.0008	0.1371	0.0115	0.0038	18	0.91	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0096	0.1483	0.0101	0.1371	0.0115	0.0038	18	0.97	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0483	0.1555	0.0010	0.1371	0.0115	0.0038	18	1.60	7%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0390	0.1925	0.0230	0.1371	0.0115	0.0038	18	4.82	20%	1
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0521	0.1339	0.0003				1			0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0009	0.1350	0.0100	0.1416	0.0075	0.0051	5	-0.80	2%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0037	0.1377	0.0018	0.1416	0.0075	0.0051	5	-0.47	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0515	0.1403	0.0034	0.1416	0.0075	0.0051	5	-0.16	0%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0025	0.1406	0.0093	0.1416	0.0075	0.0051	5	-0.13	0%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0421	0.1545	0.0010	0.1416	0.0075	0.0051	5	1.56	5%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0086	7.497	0.1070	0.1416	0.0075	0.0051	5	889.40	2597%	2
321.99	Acid Soluble Zinc , Other (%)	0042	0.0140	0.0000	0.1390	0.0168	0.0046	6	-6.88	45%	0
321.99	Acid Soluble Zinc , Other (%)	0220	0.1285	0.0010	0.1390	0.0168	0.0046	6	-0.58	4%	0
321.99	Acid Soluble Zinc , Other (%)	0506	0.1450	0.0100	0.1390	0.0168	0.0046	6	0.33	2%	0
321.99	Acid Soluble Zinc , Other (%)	0389	0.1460	0.0000	0.1390	0.0168	0.0046	6	0.38	3%	0
321.99	Acid Soluble Zinc , Other (%)	0027	0.1484	0.0005	0.1390	0.0168	0.0046	6	0.51	3%	0
321.99	Acid Soluble Zinc , Other (%)	0515	0.1525	0.0158	0.1390	0.0168	0.0046	6	0.74	5%	0

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 used in calculations, in this case the Z Scores are included for information only (Grey). An offset lab value with an astrix indicates that the value is

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				

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.