

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 150912

Grade 8-4-8

Statistical Summary

Methods: 148

Labs Reporting: 83

Issue Date : 10/31/2015

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
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	8	8	6.891	1.025	7.174		0.1401	0.0350	1.95%		0.0376	2.97%
001.99	Ammoniacal Nitrogen, Other (%)	9	9	7.229	0.2942	7.186		0.1510	0.0356	2.10%		0.0714	2.97%
003.10	Water Insoluble Nitrogen, Method 1 (%)	4	4	0.6566	0.3005	0.6566		0.3005	0.1062	45.76%		0.0253	4.26%
003.99	Water Insoluble Nitrogen, Other (%)	2	2	4.188	4.727								
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	1		7.425									
010.11	Total Nitrogen, Modified Comprehensive (8%)	8	8	8.092	0.2100	8.091	0.5526	0.1457	0.0364	1.80%	3.42%	0.0688	2.92%
010.12	Total Nitrogen, Salicylic (8%)	2	2	7.985	0.1061								
010.17	Total Nitrogen, Comprehensive (8%)	1		8.090									
010.60	Total Nitrogen, Combustion (8%)	49	46	8.141	0.1482	8.141	0.5526	0.0982	0.0102	1.21%	3.39%	0.0719	2.92%
010.99	Total Nitrogen, Other (8%)	4	4	7.946	0.6310	7.946	0.5526	0.6310	0.2231	7.94%	3.48%	0.0725	2.93%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ... (%)	5	5	4.780	0.0633	4.780		0.0633	0.0200	1.32%		0.0282	3.16%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	18	17	4.775	0.1582	4.771		0.1630	0.0280	3.42%		0.0469	3.16%
020.40	Total Phosphorus as P2O5, Automated (%)	3	3	4.577	0.4265	4.577		0.4264	0.1741	9.32%		0.3867	3.18%
020.50	Total Phosphorus as P2O5, ICP (%)	10	10	4.989	0.2834	4.892		0.1119	0.0250	2.29%		0.1336	3.15%
020.99	Total Phosphorus as P2O5, Other (%)	2	2	4.550	0.0704								
030.20	Citrate Insoluble Phosphorus as P2O5, Spectrophoto... (%)	1		0.1250									
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t... (%)	1		0.1450									
040.20	Indirect Available Phosphorus as P2O5, Spectrophot... (4%)	3	3	4.602	0.3603	4.602	0.6700	0.3603	0.1471	7.83%	7.28%	0.0500	3.18%
040.40	Indirect Available Phosphorus as P2O5, Automated (4%)	1		4.615									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q... (4%)	5	5	4.657	0.0484	4.657	0.6700	0.0484	0.0153	1.04%	7.19%	0.0340	3.17%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q... (4%)	5	5	4.777	0.0883	4.777	0.6700	0.0883	0.0279	1.85%	7.01%	0.0580	3.16%
041.20	Direct Available Phosphorus as P2O5, Spectrophotom... (4%)	1		4.335									
041.21	Direct Available Phosphorus as P2O5, Spectrophotom... (4%)	1		4.585									
041.31	Direct Available Phosphorus as P2O5, Alkalimetric ... (4%)	1		4.740									
041.40	Direct Available Phosphorus as P2O5, Automated (4%)	1		4.740									
041.50	Direct Available Phosphorus as P2O5, ICP (4%)	6	6	4.758	0.2951	4.758	0.6700	0.3346	0.0966	7.03%	7.04%	0.0838	3.16%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (4%)	6	6	4.865	0.1524	4.865	0.6700	0.1728	0.0499	3.55%	6.89%	0.0412	3.15%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ... (4%)	10	10	4.713	0.1937	4.719	0.6700	0.2042	0.0457	4.33%	7.10%	0.1193	3.17%
041.99	Direct Available Phosphorus as P2O5, Other (4%)	3	3	4.578	0.4700	4.578	0.6700	0.4700	0.1919	10.27%	7.32%	0.1633	3.18%
048.20	Water Soluble Phosphorus as P2O5, Spectrophotometr... (%)	1		3.295									
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		3.450									

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048.99	Water Soluble Phosphorus as P2O5, Other (%)	1		4.200									
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	12	11	8.134	0.1487	8.099	0.6043	0.0990	0.0211	1.22%	3.73%	0.0773	2.92%
050.10	Soluble Potassium as K2O, STPB Citrate (8%)	2	2	8.433	0.5897								
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	6	6	7.580	0.8678	7.887	0.6043	0.2493	0.0720	3.16%	3.83%	0.0889	2.93%
050.31	Soluble Potassium as K2O, AA (Citrate) (8%)	2	2	8.588	0.2652								
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (8%)	1		7.760									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	6	5	8.050	0.2621	8.050	0.6043	0.2621	0.0829	3.26%	3.75%	0.0700	2.92%
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	5	5	8.345	0.3496	8.345	0.6043	0.3496	0.1106	4.19%	3.62%	0.2460	2.91%
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	10	10	8.048	0.2695	8.078	0.6043	0.1698	0.0380	2.10%	3.74%	0.1551	2.92%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala... (8%)	6	6	8.063	0.1855	8.058	0.6043	0.1990	0.0574	2.47%	3.75%	0.1453	2.92%
050.61	Soluble Potassium as K2O, Flame Photometric (Citra... (8%)	2	2	8.043	0.3995								
050.62	Soluble Potassium as K2O, Flame Photometric (Citra... (8%)	4	4	7.964	0.1642	7.964	0.6043	0.1642	0.0581	2.06%	3.79%	0.0932	2.93%
050.99	Soluble Potassium as K2O, Other (8%)	22	21	8.162	0.4823	8.115	0.6043	0.3703	0.0571	4.56%	3.72%	0.1299	2.92%
060.00	Water (Free), Vacuum Oven (%)	3	3	1.793	0.7652	1.793		0.7652	0.3124	42.69%		0.0881	3.66%
060.99	Water (Free), Other (%)	1		1.105									
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	2	2	6.809	0.5038								
101.03	Acid Soluble Calcium, AA, 965.09, test portion 200... (%)	1		6.879									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	11	11	6.387	1.928	6.753		0.1065	0.0227	1.58%		0.1465	3.00%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C (%)	1		7.034									
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (%)	1		6.778									
101.99	Acid Soluble Calcium, Other (%)	1		6.580									
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (1.2%)	12	12	3.683	0.1788	3.680	0.3860	0.1695	0.0346	4.61%	5.24%	0.0882	3.29%
121.02	Acid Soluble Magnesium, AA, 965.09, test portion 2... (1.2%)	1		4.199									
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2... (1.2%)	1		3.684									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (1.2%)	22	22	3.727	0.7679	3.772	0.3860	0.2169	0.0327	5.75%	5.12%	0.0761	3.28%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A... (1.2%)	3	3	3.581	0.2556	3.581	0.3860	0.2556	0.1043	7.14%	5.39%	0.1748	3.30%
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (1.2%)	6	6	3.680	0.2332	3.696	0.3860	0.2368	0.0684	6.41%	5.22%	0.0948	3.29%
121.99	Acid Soluble Magnesium, Other (1.2%)	4	4	3.632	0.2413	3.632	0.3860	0.2413	0.0853	6.64%	5.31%	0.3264	3.29%
131.00	Water Soluble Magnesium, AA (%)	3	3	1.897	1.304	1.897		1.303	0.5321	68.73%		0.0923	3.63%
131.30	Water Soluble Magnesium, ICP (%)	6	6	1.138	0.1336	1.170		0.0757	0.0218	6.47%		0.0357	3.91%
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	1		2.455									
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon disu... (%)	2	2	9.208	0.1591								
143.99	Elemental Sulfur, Other (%)	1		9.330									
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - ... (%)	5	5	8.904	0.2135	8.904		0.2135	0.0675	2.40%		0.1240	2.88%
146.00	Total Sulfur in Liquid, Gravimetric - sulfate, sul... (%)	1		9.735									
148.00	Total Sulfur, Combustion (5.5%)	6	6	7.970	2.003	8.605	0.6384	0.6298	0.1818	7.32%	3.71%	0.1705	2.89%
148.01	Total Sulfur, Gravimetric - sulfate and elemental... (5.5%)	11	11	8.833	0.4721	8.822	0.6384	0.1859	0.0396	2.11%	3.62%	0.1455	2.88%
148.04	Total Sulfur, ICP, w/Br digestion (5.5%)	1		7.265									
148.07	Total Sulfur, ICP, test portion as in 2006.03 modi... (5.5%)	9	9	8.785	0.9814	8.785	0.6384	1.113	0.2623	12.67%	3.63%	0.3218	2.88%
148.99	Total Sulfur, Other (5.5%)	7	7	8.828	0.8967	8.958	0.6384	0.7133	0.1906	7.96%	3.56%	0.1091	2.88%
151.00	Acid Soluble Arsenic , AA, test portion as in 200... (ppm)	1		2.750									
151.30	Acid Soluble Arsenic , ICP (ppm)	5	5	2.647	1.105	2.647		1.105	0.3493	41.72%		0.1786	13.82%

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151.33	Acid Soluble Arsenic , ICP, 2006.03 modified w/9:... (ppm)	3	2	2.145	1.910	2.145		1.910	0.9551	89.05%		0.7426	14.26%
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	2	2	1.809	0.0580								
151.99	Acid Soluble Arsenic , Other (ppm)	1		2.555									
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	8	7	0.0202	0.0043	0.0202	0.0060	0.0048	0.0013	23.96%	14.84%	0.0004	7.19%
165.30	Acid Soluble Boron , ICP, test portion in 982.01 ... (0.02%)	10	10	0.0230	0.0114	0.0201	0.0060	0.0040	0.0009	19.98%	14.89%	0.0013	7.20%
165.99	Acid Soluble Boron , Other (0.02%)	12	11	0.0196	0.0057	0.0189	0.0060	0.0045	0.0010	24.03%	15.91%	0.0014	7.27%
181.00	Acid Soluble Cadmium , AA, test portion as in 200... (ppm)	1		0.8000									
181.30	Acid Soluble Cadmium , ICP (ppm)	5	5	1.452	1.521	1.452		1.521	0.4810	104.78%		0.0446	15.12%
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9:... (ppm)	3	3	1.648	0.8100	1.648		0.8100	0.3307	49.15%		0.3483	14.84%
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	2	2	1.150	0.4949								
181.99	Acid Soluble Cadmium , Other (ppm)	2	2	0.8200	0.3394								
190.00	Water Soluble Chlorine, Titrimetric (6%)	15	14	4.778	0.4506	4.740	0.4760	0.2762	0.0522	5.83%	5.02%	0.1004	3.16%
190.99	Water Soluble Chlorine, Other (6%)	1		4.280									
191.30	Acid Soluble Chromium , ICP (ppm)	7	7	121.0	32.75	128.2		23.44	6.263	18.28%		2.717	7.71%
191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9... (ppm)	3	3	147.2	4.570	147.2		4.570	1.866	3.10%		9.018	7.55%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	2	2	150.9	0.1450								
191.99	Acid Soluble Chromium , Other (ppm)	3	3	125.8	36.90	125.8		36.90	15.07	29.33%		11.89	7.73%
202.30	Acid Soluble Cobalt , ICP (ppm)	6	6	12.13	3.922	12.38		3.902	1.126	31.52%		0.2868	10.95%
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3... (ppm)	3	3	13.19	4.278	13.19		4.278	1.747	32.43%		2.083	10.85%
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	2	2	11.07	3.364								
202.99	Acid Soluble Cobalt , Other (ppm)	2	2	10.67	1.358								
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.05%)	10	10	0.0746	0.0240	0.0688	0.0118	0.0048	0.0011	7.01%	8.56%	0.0019	5.98%
221.03	Acid Soluble Copper , AA, 965.09, test portion 20... (0.05%)	2	2	0.0689	0.0006								
221.30	Acid Soluble Copper , ICP, test portion inorganic... (0.05%)	23	22	0.0658	0.0148	0.0688	0.0118	0.0042	0.0006	6.14%	8.56%	0.0016	5.98%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-... (0.05%)	3	3	0.0630	0.0019	0.0630	0.0118	0.0019	0.0008	3.05%	9.34%	0.0013	6.06%
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-... (0.05%)	5	5	0.0679	0.0033	0.0679	0.0118	0.0033	0.0010	4.80%	8.67%	0.0019	6.00%
221.99	Acid Soluble Copper , Other (0.05%)	4	4	0.0616	0.0083	0.0616	0.0118	0.0083	0.0029	13.47%	9.55%	0.0135	6.08%
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	10	10	1.203	0.2153	1.227	0.1322	0.1892	0.0423	15.43%	5.39%	0.0506	3.88%
241.03	Acid Soluble Iron , AA, 965.09, test portion 2006... (0.5%)	1		1.406									
241.30	Acid Soluble Iron , ICP, test portion inorganic 96... (0.5%)	21	20	1.292	0.2145	1.326	0.1322	0.1299	0.0205	9.80%	4.99%	0.0535	3.83%
241.32	Acid Soluble Iron , ICP, test portion 2006.03A-C ... (0.5%)	3	3	1.143	0.4904	1.143	0.1322	0.4904	0.2002	42.91%	5.79%	0.0129	3.92%
241.33	Acid Soluble Iron , ICP, test portion 2006.03A-C, ... (0.5%)	8	8	1.288	0.1744	1.310	0.1322	0.1561	0.0390	11.91%	5.05%	0.0493	3.84%
241.99	Acid Soluble Iron , Other (0.5%)	4	4	0.9982	0.3437	0.9982	0.1322	0.3436	0.1215	34.43%	6.62%	0.1256	4.00%
251.00	Acid Soluble Lead , AA, test portion as in 2006.0... (ppm)	1		6.500									
251.30	Acid Soluble Lead , ICP (ppm)	7	7	6.916	1.091	6.800		0.9985	0.2669	14.68%		0.5144	11.99%
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 H... (ppm)	3	1	8.115		6.800		0.9985	0.7060	14.68%		0.6597	11.99%
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	2	2	9.368	0.1156								
251.99	Acid Soluble Lead , Other (ppm)	4	4	29.28	48.28	29.28		48.28	17.07	164.89%		0.7675	9.62%
261.00	Acid Soluble Manganese , AA, Mn2+ only (0.06%)	2	2	0.2290	0.0071								
261.11	Acid Soluble Manganese , AA, total Mn (0.06%)	2	2	0.1900	0.0283								
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (0.06%)	6	6	0.2295	0.0081	0.2295	0.0273	0.0092	0.0027	4.02%	5.95%	0.0086	4.99%
261.15	Acid Soluble Manganese , AA, 965.09, test portion... (0.06%)	2	2	0.2196	0.0112								

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261.30	Acid Soluble Manganese , ICP, test portion 972.02... (0.06%)	9	8	0.1989	0.0747	0.2238	0.0273	0.0064	0.0016	2.85%	6.10%	0.0018	5.01%
261.31	Acid Soluble Manganese , ICP, test portion 972.02... (0.06%)	5	5	0.2255	0.0297	0.2255	0.0273	0.0297	0.0094	13.16%	6.06%	0.0094	5.00%
261.32	Acid Soluble Manganese , ICP, test portion inorga... (0.06%)	6	6	0.2335	0.0142	0.2353	0.0273	0.0117	0.0034	4.96%	5.80%	0.0117	4.97%
261.34	Acid Soluble Manganese , ICP, test portion 2006.0... (0.06%)	2	2	0.2225	0.0389								
261.35	Acid Soluble Manganese , ICP, test portion 2006.0... (0.06%)	8	8	0.2149	0.0162	0.2184	0.0273	0.0118	0.0030	5.41%	6.25%	0.0053	5.03%
261.99	Acid Soluble Manganese , Other (0.06%)	5	5	0.2124	0.0132	0.2124	0.0273	0.0132	0.0042	6.22%	6.43%	0.0106	5.05%
281.00	Acid Soluble Mercury , AA (ppm)	1		0.2225									
281.30	Acid Soluble Mercury , ICP (ppm)	2	1	0.2190									
289.30	Acid Soluble Molybdenum , ICP (5ppm)	9	9	10.52	3.454	10.67	4.2545	3.672	0.8655	34.41%	19.94%	0.2986	11.20%
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w... (5ppm)	5	5	8.394	6.411	8.394	4.2545	6.411	2.027	76.37%	25.34%	0.9593	11.61%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (5ppm)	2	2	11.72	1.507								
289.99	Acid Soluble Molybdenum , Other (5ppm)	1		21.40									
291.00	Acid Soluble Nickel , AA, test portion as in 2006... (ppm)	1		73.50									
291.30	Acid Soluble Nickel , ICP (ppm)	7	6	52.10	20.64	52.10		23.40	6.756	44.92%		0.9848	8.82%
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3... (ppm)	3	3	68.73	1.127	68.73		1.127	0.4600	1.64%		2.047	8.46%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	2	2	72.66	0.2235								
291.99	Acid Soluble Nickel , Other (ppm)	3	3	53.72	25.99	53.72		25.99	10.61	48.38%		1.687	8.78%
301.30	Acid Soluble Selenium , ICP (ppm)	1		0.0000									
301.33	Acid Soluble Selenium , ICP, 2006.03 modified w/9... (ppm)	1		0.0000									
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	1		0.0721									
301.99	Acid Soluble Selenium , Other (ppm)	1		0.3600									
311.00	Sodium, AA (%)	1		0.1600									
311.30	Sodium, Flame Photometric (%)	1		0.2000									
311.32	Sodium, ICP, 2006.03 test portion (%)	1		0.1800									
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test ... (%)	3	3	0.2061	0.0570	0.2061		0.0570	0.0233	27.68%		0.0072	5.07%
311.99	Sodium, Other (%)	4	4	0.2043	0.0337	0.2043		0.0337	0.0119	16.50%		0.0055	5.08%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	13	13	0.1507	0.0339	0.1584	0.0204	0.0111	0.0022	6.99%	6.44%	0.0064	5.28%
321.02	Acid Soluble Zinc , AA, 965.09, test portion 2006... (0.05%)	1		0.1386									
321.03	Acid Soluble Zinc , AA, 965.09, test portion 2006... (0.05%)	1		0.1611									
321.30	Acid Soluble Zinc , ICP, test portion inorganic 9... (0.05%)	25	24	0.1529	0.0146	0.1550	0.0204	0.0097	0.0014	6.26%	6.58%	0.0037	5.30%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C ... (0.05%)	2	2	0.1354	0.0065								
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C,... (0.05%)	8	8	0.1471	0.0142	0.1500	0.0204	0.0085	0.0021	5.64%	6.80%	0.0044	5.32%
321.99	Acid Soluble Zinc , Other (0.05%)	4	4	0.1539	0.0083	0.1539	0.0204	0.0083	0.0029	5.37%	6.63%	0.0085	5.30%

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 150912

Grade 8-4-8

Method Precision Report

Issue Date : 10/31/2015

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
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	8	7	7.246	0.2198	0.2186	0.0320	0.2209	3.02%	0.44%	3.05%	6.913
001.99	Ammoniacal Nitrogen, Other (%)	9	8	7.142	0.1454	0.1396	0.0577	0.1511	1.95%	0.81%	2.11%	2.618
010.11	Total Nitrogen, Modified Comprehensive (8%)	8	7	8.037	0.1532	0.1502	0.0424	0.1561	1.87%	0.53%	1.94%	3.680
010.60	Total Nitrogen, Combustion (8%)	49	42	8.140	0.1029	0.0933	0.0612	0.1116	1.15%	0.75%	1.37%	1.822
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	18	17	4.775	0.1582	0.1548	0.0461	0.1615	3.24%	0.97%	3.38%	3.500
020.50	Total Phosphorus as P2O5, ICP (%)	10	9	4.912	0.1519	0.1287	0.1142	0.1721	2.62%	2.33%	3.50%	1.507
041.50	Direct Available Phosphorus as P2O5, ICP (4%)	6	5	4.800	0.3096	0.3083	0.0395	0.3109	6.42%	0.82%	6.48%	7.863
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-EDTA Ext. (4%)	6	6	4.865	0.1524	0.1495	0.0415	0.1552	3.07%	0.85%	3.19%	3.741
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (4%)	10	10	4.713	0.1937	0.1791	0.1044	0.2073	3.80%	2.22%	4.40%	1.985
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	12	11	8.134	0.1487	0.1342	0.0907	0.1620	1.65%	1.12%	1.99%	1.785
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	6	5	7.924	0.2330	0.2269	0.0747	0.2389	2.86%	0.94%	3.02%	3.198
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	6	5	8.050	0.2621	0.2593	0.0534	0.2648	3.22%	0.66%	3.29%	4.960
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	10	10	8.048	0.2695	0.2464	0.1541	0.2906	3.06%	1.91%	3.61%	1.886
050.60	Soluble Potassium as K2O, Flame Photometric (Oxalate) (8%)	6	6	8.063	0.1855	0.1587	0.1360	0.2090	1.97%	1.69%	2.59%	1.537
050.99	Soluble Potassium as K2O, Other (8%)	22	19	8.070	0.3784	0.3737	0.0835	0.3829	4.63%	1.03%	4.75%	4.586
101.30	Acid Soluble Calcium, ICP, test portion inorganic 965.09 (%)	11	9	6.937	0.5815	0.5765	0.1072	0.5864	8.31%	1.55%	8.45%	5.472
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (1.2%)	12	12	3.683	0.1788	0.1700	0.0782	0.1871	4.62%	2.12%	5.08%	2.394
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (1.2%)	22	21	3.853	0.5021	0.4996	0.0721	0.5047	12.97%	1.87%	13.10%	7.000
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A-C, w/dual acid (1.2%)	6	6	3.680	0.2332	0.2251	0.0861	0.2410	6.12%	2.34%	6.55%	2.800
131.30	Water Soluble Magnesium, ICP (%)	6	5	1.188	0.0561	0.0505	0.0345	0.0612	4.25%	2.90%	5.15%	1.773
148.00	Total Sulfur, Combustion (5.5%)	6	5	8.774	0.4160	0.3962	0.1794	0.4349	4.52%	2.04%	4.96%	2.424
148.01	Total Sulfur, Gravimetric - sulfate and elemental (5.5%)	11	11	8.833	0.4721	0.4602	0.1487	0.4837	5.21%	1.68%	5.48%	3.253
148.07	Total Sulfur, ICP, test portion as in 2006.03 modified w/9:3 HNO3:HCl (5.5%)	9	8	8.650	0.9566	0.9465	0.1957	0.9665	10.94%	2.26%	11.17%	4.939
148.99	Total Sulfur, Other (5.5%)	7	7	8.828	0.8967	0.8930	0.1149	0.9004	10.12%	1.30%	10.20%	7.835
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	8	7	0.0202	0.0043	0.0043	0.0005	0.0043	21.06%	2.29%	21.19%	9.253
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (0.02%)	10	9	0.0195	0.0031	0.0029	0.0014	0.0033	15.11%	7.18%	16.73%	2.329
165.99	Acid Soluble Boron , Other (0.02%)	12	9	0.0174	0.0027	0.0027	0.0004	0.0027	15.27%	2.03%	15.40%	7.587
190.00	Water Soluble Chlorine, Titrimetric (6%)	15	13	4.724	0.4192	0.4163	0.0700	0.4221	8.81%	1.48%	8.94%	6.033
191.30	Acid Soluble Chromium , ICP (ppm)	7	7	121.0	32.75	32.71	2.154	32.78	27.03%	1.78%	27.09%	15.22
202.30	Acid Soluble Cobalt , ICP (ppm)	6	6	12.13	3.922	3.918	0.2694	3.927	32.30%	2.22%	32.38%	14.58

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
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.05%)	10	9	0.0671	0.0050	0.0049	0.0015	0.0052	7.33%	2.28%	7.68%	3.362
221.30	Acid Soluble Copper , ICP, test portion inorganic 965.09 (0.05%)	23	21	0.0688	0.0048	0.0046	0.0018	0.0050	6.76%	2.58%	7.23%	2.806
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	10	10	1.203	0.2153	0.2132	0.0425	0.2173	17.71%	3.53%	18.06%	5.112
241.30	Acid Soluble Iron , ICP, test portion inorganic 965.09 (0.5%)	21	19	1.328	0.1475	0.1439	0.0456	0.1510	10.84%	3.43%	11.37%	3.311
241.33	Acid Soluble Iron , ICP, test portion 2006.03A-C, w/dual acid (0.5%)	8	8	1.288	0.1744	0.1714	0.0452	0.1773	13.31%	3.51%	13.77%	3.922
251.30	Acid Soluble Lead , ICP (ppm)	7	7	6.916	1.091	1.043	0.4524	1.137	15.08%	6.54%	16.44%	2.513
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (0.06%)	6	5	0.2294	0.0091	0.0087	0.0039	0.0095	3.78%	1.68%	4.14%	2.458
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (0.06%)	9	6	0.2253	0.0055	0.0055	0.0007	0.0055	2.44%	0.31%	2.46%	7.925
261.32	Acid Soluble Manganese , ICP, test portion inorganic 965.09 (0.06%)	6	6	0.2335	0.0142	0.0114	0.0118	0.0164	4.90%	5.06%	7.04%	1.392
261.35	Acid Soluble Manganese , ICP, test portion 2006.03A-C, w/dual acid (0.06%)	8	8	0.2149	0.0162	0.0158	0.0049	0.0165	7.35%	2.30%	7.70%	3.347
289.30	Acid Soluble Molybdenum , ICP (5ppm)	9	9	10.52	3.454	3.447	0.2926	3.460	32.78%	2.78%	32.90%	11.82
291.30	Acid Soluble Nickel , ICP (ppm)	7	6	52.10	20.64	20.63	0.8884	20.65	39.59%	1.71%	39.63%	23.24
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	13	12	0.1598	0.0088	0.0076	0.0061	0.0098	4.78%	3.81%	6.11%	1.605
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (0.05%)	25	23	0.1546	0.0124	0.0121	0.0037	0.0127	7.82%	2.42%	8.19%	3.380
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, w/dual acid (0.05%)	8	7	0.1517	0.0062	0.0056	0.0038	0.0068	3.69%	2.51%	4.46%	1.778

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Methods: 148

Sample # 150912

Lab Values

Labs Reporting: 83

Grade 8-4-8

Issue Date : 10/31/2015

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				
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0230	4.405	0.0700	7.174	0.1401	0.0376	8	-19.76	19%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0177	7.000	0.0009	7.174	0.1401	0.0376	8	-1.24	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0405	7.155	0.0300	7.174	0.1401	0.0376	8	-0.14	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0513	7.175	0.0300	7.174	0.1401	0.0376	8	0.01	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0169	7.185	0.0300	7.174	0.1401	0.0376	8	0.08	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0498	7.200	0.0000	7.174	0.1401	0.0376	8	0.19	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0481	7.310	0.1000	7.174	0.1401	0.0376	8	0.97	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0486	7.700	0.0400	7.174	0.1401	0.0376	8	3.75	4%	0
001.99	Ammoniacal Nitrogen, Other (%)	0027	6.834	0.1630	7.186	0.1510	0.0714	9	-2.34	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	7.095	0.0500	7.186	0.1510	0.0714	9	-0.61	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0371	7.100	0.0200	7.186	0.1510	0.0714	9	-0.57	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0397	7.110	0.0400	7.186	0.1510	0.0714	9	-0.51	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	7.235	0.1100	7.186	0.1510	0.0714	9	0.32	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0220	7.240	0.1000	7.186	0.1510	0.0714	9	0.35	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0510	7.245	0.0100	7.186	0.1510	0.0714	9	0.39	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0487	7.280	0.0000	7.186	0.1510	0.0714	9	0.62	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	7.925	0.1500	7.186	0.1510	0.0714	9	4.89	5%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0220	0.2250	0.0700	0.6566	0.3005	0.0253	4	-1.44	33%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0230	0.7050	0.0100	0.6566	0.3005	0.0253	4	0.16	4%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0029	0.7820	0.0120	0.6566	0.3005	0.0253	4	0.42	10%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0117	0.9145	0.0090	0.6566	0.3005	0.0253	4	0.86	20%	0
003.99	Water Insoluble Nitrogen, Other (%)	0027	0.8450	0.0100	4.188	4.727	0.0650	2	-0.71	40%	0
003.99	Water Insoluble Nitrogen, Other (%)	0230	7.530	0.1200	4.188	4.727	0.0650	2	0.71	40%	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0309	7.425	0.4700			0.4700	1			0
010.11	Total Nitrogen, Modified Comprehensive (8%)	0474	7.730	0.0000	8.091	0.1457	0.0688	8	-2.47	2%	0
010.11	Total Nitrogen, Modified Comprehensive (8%)	0211	7.995	0.1100	8.091	0.1457	0.0688	8	-0.66	1%	0
010.11	Total Nitrogen, Modified Comprehensive (8%)	0416	8.015	0.0700	8.091	0.1457	0.0688	8	-0.52	0%	0
010.11	Total Nitrogen, Modified Comprehensive (8%)	0105	8.095	0.0300	8.091	0.1457	0.0688	8	0.03	0%	0
010.11	Total Nitrogen, Modified Comprehensive (8%)	0371	8.100	0.0600	8.091	0.1457	0.0688	8	0.06	0%	0
010.11	Total Nitrogen, Modified Comprehensive (8%)	0090	8.110	0.0600	8.091	0.1457	0.0688	8	0.13	0%	0
010.11	Total Nitrogen, Modified Comprehensive (8%)	0510	8.215	0.0100	8.091	0.1457	0.0688	8	0.85	1%	0
010.11	Total Nitrogen, Modified Comprehensive (8%)	0309	8.475	0.2100	8.091	0.1457	0.0688	8	2.64	2%	0
010.12	Total Nitrogen, Salicylic (8%)	0185	7.910	0.0000	7.985	0.1061	0.0600	2	-0.71	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				
010.12	Total Nitrogen, Salicylic (8%)	0481	8.060	0.1200	7.985	0.1061	0.0600	2	0.71	0%	0
010.17	Total Nitrogen, Comprehensive (8%)	0220	8.090	0.1000			0.1000	1			0
010.60	Total Nitrogen, Combustion (8%)	0275	7.615	0.0500	8.141	0.0982	0.0719	46	-5.36	3%	0
010.60	Total Nitrogen, Combustion (8%)	0394	7.900	0.0000	8.141	0.0982	0.0719	46	-2.46	1%	0
010.60	Total Nitrogen, Combustion (8%)	0041	7.915	0.0700	8.141	0.0982	0.0719	46	-2.31	1%	0
010.60	Total Nitrogen, Combustion (8%)	0034	7.998	0.1540	8.141	0.0982	0.0719	46	-1.46	1%	0
010.60	Total Nitrogen, Combustion (8%)	0377	8.025	0.1900	8.141	0.0982	0.0719	46	-1.19	1%	0
010.60	Total Nitrogen, Combustion (8%)	0025	8.030	0.0200	8.141	0.0982	0.0719	46	-1.13	1%	0
010.60	Total Nitrogen, Combustion (8%)	0234	8.030	0.0200	8.141	0.0982	0.0719	46	-1.13	1%	0
010.60	Total Nitrogen, Combustion (8%)	0023	8.042	0.0065	8.141	0.0982	0.0719	46	-1.01	1%	0
010.60	Total Nitrogen, Combustion (8%)	0007	8.050	0.1000	8.141	0.0982	0.0719	46	-0.93	1%	0
010.60	Total Nitrogen, Combustion (8%)	0351	8.057	0.0030	8.141	0.0982	0.0719	46	-0.86	1%	0
010.60	Total Nitrogen, Combustion (8%)	0102	8.065	0.0900	8.141	0.0982	0.0719	46	-0.78	0%	0
010.60	Total Nitrogen, Combustion (8%)	0402	8.078	0.0030	8.141	0.0982	0.0719	46	-0.65	0%	0
010.60	Total Nitrogen, Combustion (8%)	0043	8.080	0.0200	8.141	0.0982	0.0719	46	-0.63	0%	0
010.60	Total Nitrogen, Combustion (8%)	0231	8.080	0.0400	8.141	0.0982	0.0719	46	-0.63	0%	0
010.60	Total Nitrogen, Combustion (8%)	0105	8.100	0.0200	8.141	0.0982	0.0719	46	-0.42	0%	0
010.60	Total Nitrogen, Combustion (8%)	0096	8.105	0.0500	8.141	0.0982	0.0719	46	-0.37	0%	0
010.60	Total Nitrogen, Combustion (8%)	0162	8.105	0.0300	8.141	0.0982	0.0719	46	-0.37	0%	0
010.60	Total Nitrogen, Combustion (8%)	0356	8.120	0.4000	8.141	0.0982	0.0719	46	-0.22	0%	0
010.60	Total Nitrogen, Combustion (8%)	0405	8.120	0.0600	8.141	0.0982	0.0719	46	-0.22	0%	0
010.60	Total Nitrogen, Combustion (8%)	0452	8.125	0.0300	8.141	0.0982	0.0719	46	-0.17	0%	0
010.60	Total Nitrogen, Combustion (8%)	0324	8.135	0.0100	8.141	0.0982	0.0719	46	-0.07	0%	0
010.60	Total Nitrogen, Combustion (8%)	0494	8.140	0.0800	8.141	0.0982	0.0719	46	-0.01	0%	0
010.60	Total Nitrogen, Combustion (8%)	0073	8.145	0.0300	8.141	0.0982	0.0719	46	0.04	0%	0
010.60	Total Nitrogen, Combustion (8%)	0233	8.146	0.0100	8.141	0.0982	0.0719	46	0.05	0%	0
010.60	Total Nitrogen, Combustion (8%)	0040	8.150	0.1000	8.141	0.0982	0.0719	46	0.09	0%	0
010.60	Total Nitrogen, Combustion (8%)	0136	8.155	0.0300	8.141	0.0982	0.0719	46	0.14	0%	0
010.60	Total Nitrogen, Combustion (8%)	0472	8.159	0.0080	8.141	0.0982	0.0719	46	0.18	0%	0
010.60	Total Nitrogen, Combustion (8%)	0291	8.165	0.0100	8.141	0.0982	0.0719	46	0.24	0%	0
010.60	Total Nitrogen, Combustion (8%)	0307	8.170	0.1820	8.141	0.0982	0.0719	46	0.29	0%	0
010.60	Total Nitrogen, Combustion (8%)	0360	8.170	0.1400	8.141	0.0982	0.0719	46	0.29	0%	0
010.60	Total Nitrogen, Combustion (8%)	0451	8.176	0.2160	8.141	0.0982	0.0719	46	0.35	0%	0
010.60	Total Nitrogen, Combustion (8%)	0035	8.180	0.0800	8.141	0.0982	0.0719	46	0.39	0%	0
010.60	Total Nitrogen, Combustion (8%)	0049	8.195	0.0100	8.141	0.0982	0.0719	46	0.55	0%	0
010.60	Total Nitrogen, Combustion (8%)	0157	8.195	0.0500	8.141	0.0982	0.0719	46	0.55	0%	0
010.60	Total Nitrogen, Combustion (8%)	0292	8.195	0.0100	8.141	0.0982	0.0719	46	0.55	0%	0
010.60	Total Nitrogen, Combustion (8%)	0483	8.225	0.0500	8.141	0.0982	0.0719	46	0.85	1%	0
010.60	Total Nitrogen, Combustion (8%)	0354	8.227	0.0170	8.141	0.0982	0.0719	46	0.87	1%	0
010.60	Total Nitrogen, Combustion (8%)	0029	8.233	0.3510	8.141	0.0982	0.0719	46	0.93	1%	0
010.60	Total Nitrogen, Combustion (8%)	0230	8.235	0.1300	8.141	0.0982	0.0719	46	0.95	1%	0
010.60	Total Nitrogen, Combustion (8%)	0482	8.255	0.2500	8.141	0.0982	0.0719	46	1.16	1%	0
010.60	Total Nitrogen, Combustion (8%)	0055	8.260	0.0600	8.141	0.0982	0.0719	46	1.21	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 (8%)	0177	8.263	0.0080	8.141	0.0982	0.0719	46	1.24	1%	0
010.60	Total Nitrogen, Combustion (8%)	0406	8.265	0.0100	8.141	0.0982	0.0719	46	1.26	1%	0
010.60	Total Nitrogen, Combustion (8%)	0042	8.300	0.0000	8.141	0.0982	0.0719	46	1.62	1%	0
010.60	Total Nitrogen, Combustion (8%)	0389	8.455	0.0900	8.141	0.0982	0.0719	46	3.19	2%	0
010.60	Total Nitrogen, Combustion (8%)	0260	8.660	0.0200	8.141	0.0982	0.0719	46	5.28	3%	0
010.60	Total Nitrogen, Combustion (8%)	0095	8.235	0.4100	8.141	0.0982	0.0719	46	0.95	1%	1
010.60	Total Nitrogen, Combustion (8%)	0325	8.240	0.4200	8.141	0.0982	0.0719	46	1.00	1%	1
010.60	Total Nitrogen, Combustion (8%)	0516	2.355*	0.1100	8.141	0.0982	0.0719	46	-58.94	36%	2
010.99	Total Nitrogen, Other (8%)	0518	7.020*	0.1000	7.946	0.6310	0.0725	4	-1.47	6%	0
010.99	Total Nitrogen, Other (8%)	0487	8.120	0.0000	7.946	0.6310	0.0725	4	0.28	1%	0
010.99	Total Nitrogen, Other (8%)	0513	8.215	0.0500	7.946	0.6310	0.0725	4	0.43	2%	0
010.99	Total Nitrogen, Other (8%)	0506	8.430	0.1400	7.946	0.6310	0.0725	4	0.77	3%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0157	4.730	0.0200	4.780	0.0633	0.0282	5	-0.79	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0211	4.735	0.0100	4.780	0.0633	0.0282	5	-0.71	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0322	4.751	0.0010	4.780	0.0633	0.0282	5	-0.47	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0090	4.805	0.0500	4.780	0.0633	0.0282	5	0.39	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0105	4.880	0.0600	4.780	0.0633	0.0282	5	1.58	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0406	4.495	0.1500	4.771	0.1630	0.0469	17	-1.69	3%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0428	4.553	0.1072	4.771	0.1630	0.0469	17	-1.34	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0416	4.635	0.0100	4.771	0.1630	0.0469	17	-0.83	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	4.650	0.0000	4.771	0.1630	0.0469	17	-0.74	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0481	4.665	0.1100	4.771	0.1630	0.0469	17	-0.65	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	4.710	0.0200	4.771	0.1630	0.0469	17	-0.37	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	4.715	0.0100	4.771	0.1630	0.0469	17	-0.34	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0177	4.731	0.0203	4.771	0.1630	0.0469	17	-0.24	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0169	4.760	0.0400	4.771	0.1630	0.0469	17	-0.07	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0371	4.765	0.0500	4.771	0.1630	0.0469	17	-0.04	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	4.810	0.0000	4.771	0.1630	0.0469	17	0.24	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	4.835	0.0100	4.771	0.1630	0.0469	17	0.39	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0457	4.925	0.0500	4.771	0.1630	0.0469	17	0.95	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0394	4.930	0.0000	4.771	0.1630	0.0469	17	0.98	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0474	4.935	0.0700	4.771	0.1630	0.0469	17	1.01	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0506	4.955	0.1100	4.771	0.1630	0.0469	17	1.13	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0516	5.100	0.0400	4.771	0.1630	0.0469	17	2.02	3%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	4.635	0.6300	4.771	0.1630	0.0469	17	-0.83	1%	1
020.40	Total Phosphorus as P2O5, Automated (%)	0035	4.090	0.9400	4.577	0.4264	0.3867	3	-1.14	5%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0096	4.755	0.1500	4.577	0.4264	0.3867	3	0.42	2%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0105	4.885	0.0700	4.577	0.4264	0.3867	3	0.72	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	4.735	0.0100	4.892	0.1119	0.1336	10	-1.41	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	4.815	0.2700	4.892	0.1119	0.1336	10	-0.69	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	4.820	0.2600	4.892	0.1119	0.1336	10	-0.65	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0402	4.834	0.0440	4.892	0.1119	0.1336	10	-0.52	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0307	4.846	0.0520	4.892	0.1119	0.1336	10	-0.41	0%	0

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020.50	Total Phosphorus as P2O5, ICP (%)	0389	4.890	0.0600	4.892	0.1119	0.1336	10	-0.02	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0157	4.945	0.1100	4.892	0.1119	0.1336	10	0.47	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0260	5.145	0.2700	4.892	0.1119	0.1336	10	2.26	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	5.175	0.0300	4.892	0.1119	0.1336	10	2.53	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	5.685	0.2300	4.892	0.1119	0.1336	10	7.08	8%	0
020.99	Total Phosphorus as P2O5, Other (%)	0515	4.501	0.0630	4.550	0.0704	0.0315	2	-0.71	1%	0
020.99	Total Phosphorus as P2O5, Other (%)	0487	4.600	0.0000	4.550	0.0704	0.0315	2	0.71	1%	0
030.20	Citrate Insoluble Phosphorus as P2O5, Spectro... (%)	0405	0.1250	0.0100			0.0100	1			0
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	0.1450	0.0500			0.0500	1			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (4%)	0498	4.250	0.1000	4.602	0.3603	0.0500	3	-0.98	4%	0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (4%)	0405	4.585	0.0300	4.602	0.3603	0.0500	3	-0.05	0%	0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (4%)	0513	4.970	0.0200	4.602	0.3603	0.0500	3	1.02	4%	0
040.40	Indirect Available Phosphorus as P2O5, Automa... (4%)	0096	4.615	0.0900			0.0900	1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0102	4.600	0.0000	4.657	0.0484	0.0340	5	-1.18	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0493	4.625	0.0500	4.657	0.0484	0.0340	5	-0.66	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0040	4.650	0.1000	4.657	0.0484	0.0340	5	-0.14	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0049	4.690	0.0200	4.657	0.0484	0.0340	5	0.68	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0041	4.720	0.0000	4.657	0.0484	0.0340	5	1.30	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0485	4.670	0.0200	4.777	0.0883	0.0580	5	-1.21	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0185	4.740	0.0400	4.777	0.0883	0.0580	5	-0.42	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0105	4.765	0.0900	4.777	0.0883	0.0580	5	-0.14	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0055	4.800	0.0600	4.777	0.0883	0.0580	5	0.26	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (4%)	0117	4.910	0.0800	4.777	0.0883	0.0580	5	1.51	1%	0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (4%)	0027	4.335	0.0700			0.0700	1			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (4%)	0055	4.585	0.1900			0.1900	1			0
041.31	Direct Available Phosphorus as P2O5, Alkalime... (4%)	0220	4.740	0.0400			0.0400	1			0
041.40	Direct Available Phosphorus as P2O5, Automate... (4%)	0095	4.740	0.1000			0.1000	1			0
041.50	Direct Available Phosphorus as P2O5, ICP (4%)	0325	4.345	0.0100	4.758	0.3346	0.0838	6	-1.23	4%	0
041.50	Direct Available Phosphorus as P2O5, ICP (4%)	0007	4.550	0.3000	4.758	0.3346	0.0838	6	-0.62	2%	0
041.50	Direct Available Phosphorus as P2O5, ICP (4%)	0043	4.690	0.1000	4.758	0.3346	0.0838	6	-0.20	1%	0
041.50	Direct Available Phosphorus as P2O5, ICP (4%)	0025	4.794	0.0730	4.758	0.3346	0.0838	6	0.11	0%	0
041.50	Direct Available Phosphorus as P2O5, ICP (4%)	0291	5.055	0.0100	4.758	0.3346	0.0838	6	0.89	3%	0
041.50	Direct Available Phosphorus as P2O5, ICP (4%)	0452	5.115	0.0100	4.758	0.3346	0.0838	6	1.07	4%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (4%)	0478	4.695	0.0300	4.865	0.1728	0.0412	6	-0.99	2%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (4%)	0377	4.735	0.0900	4.865	0.1728	0.0412	6	-0.75	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (4%)	0233	4.753	0.1070	4.865	0.1728	0.0412	6	-0.65	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (4%)	0360	4.995	0.0100	4.865	0.1728	0.0412	6	0.75	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (4%)	0023	5.000	0.0000	4.865	0.1728	0.0412	6	0.78	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (4%)	0131	5.015	0.0100	4.865	0.1728	0.0412	6	0.87	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0397	4.345	0.1700	4.719	0.2042	0.1193	10	-1.83	4%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0034	4.537	0.1524	4.719	0.2042	0.1193	10	-0.89	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0472	4.595	0.0500	4.719	0.2042	0.1193	10	-0.61	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0043	4.635	0.0500	4.719	0.2042	0.1193	10	-0.41	1%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0029	4.715	0.0700	4.719	0.2042	0.1193	10	-0.02	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0136	4.720	0.0400	4.719	0.2042	0.1193	10	0.00	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0105	4.815	0.2900	4.719	0.2042	0.1193	10	0.47	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0513	4.875	0.0700	4.719	0.2042	0.1193	10	0.76	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0354	4.885	0.2510	4.719	0.2042	0.1193	10	0.81	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (4%)	0231	5.005	0.0500	4.719	0.2042	0.1193	10	1.40	3%	0
041.99	Direct Available Phosphorus as P2O5, Other (4%)	0230	4.050*	0.3600	4.578	0.4700	0.1633	3	-1.12	6%	0
041.99	Direct Available Phosphorus as P2O5, Other (4%)	0105	4.735	0.0300	4.578	0.4700	0.1633	3	0.33	2%	0
041.99	Direct Available Phosphorus as P2O5, Other (4%)	0506	4.950	0.1000	4.578	0.4700	0.1633	3	0.79	4%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0405	3.295	0.0500			0.0500	1			0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	3.450	0.1000			0.1000	1			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0518	4.200	0.0000			0.0000	1			0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0405	7.980	0.0200	8.099	0.0990	0.0773	11	-1.20	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0114	8.010	0.0000	8.099	0.0990	0.0773	11	-0.90	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0220	8.015	0.0300	8.099	0.0990	0.0773	11	-0.85	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0090	8.040	0.0200	8.099	0.0990	0.0773	11	-0.60	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0231	8.060	0.0000	8.099	0.0990	0.0773	11	-0.40	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0049	8.070	0.2600	8.099	0.0990	0.0773	11	-0.29	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0416	8.115	0.0300	8.099	0.0990	0.0773	11	0.16	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0211	8.190	0.0200	8.099	0.0990	0.0773	11	0.92	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0494	8.210	0.1400	8.099	0.0990	0.0773	11	1.12	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0055	8.335	0.0300	8.099	0.0990	0.0773	11	2.38	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0102	8.450	0.3000	8.099	0.0990	0.0773	11	3.54	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (8%)	0230	8.730	0.6200	8.099	0.0990	0.0773	11	6.37	4%	1
050.10	Soluble Potassium as K2O, STPB Citrate (8%)	0322	8.016	0.0360	8.433	0.5897	0.1780	2	-0.71	2%	0
050.10	Soluble Potassium as K2O, STPB Citrate (8%)	0117	8.850	0.3200	8.433	0.5897	0.1780	2	0.71	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0516	5.860*	0.2200	7.887	0.2493	0.0889	6	-8.13	13%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0428	7.533	0.0436	7.887	0.2493	0.0889	6	-1.42	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0040	7.900	0.0000	7.887	0.2493	0.0889	6	0.05	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0157	7.995	0.2300	7.887	0.2493	0.0889	6	0.43	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0136	8.095	0.0100	7.887	0.2493	0.0889	6	0.83	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (8%)	0356	8.095	0.0300	7.887	0.2493	0.0889	6	0.83	1%	0
050.31	Soluble Potassium as K2O, AA (Citrate) (8%)	0498	8.400	0.4000	8.588	0.2652	0.6750	2	-0.71	1%	0
050.31	Soluble Potassium as K2O, AA (Citrate) (8%)	0472	8.775	0.9500	8.588	0.2652	0.6750	2	0.71	1%	0
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (8%)	0185	7.760	0.0600			0.0600	1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0055	7.795	0.0500	8.050	0.2621	0.0700	5	-0.97	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0157	7.850	0.0800	8.050	0.2621	0.0700	5	-0.76	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0402	8.053	0.0400	8.050	0.2621	0.0700	5	0.01	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0292	8.090	0.0600	8.050	0.2621	0.0700	5	0.15	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0324	8.460	0.1200	8.050	0.2621	0.0700	5	1.57	3%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (8%)	0406	7.735	0.9300	8.050	0.2621	0.0700	5	-1.20	2%	1
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0007	7.750	0.5000	8.345	0.3496	0.2460	5	-1.70	4%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0043	8.325	0.1100	8.345	0.3496	0.2460	5	-0.06	0%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0452	8.475	0.0100	8.345	0.3496	0.2460	5	0.37	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0483	8.585	0.5900	8.345	0.3496	0.2460	5	0.69	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (8%)	0291	8.590	0.0200	8.345	0.3496	0.2460	5	0.70	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0485	7.550	0.4400	8.078	0.1698	0.1551	10	-3.11	3%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0025	7.713	0.3750	8.078	0.1698	0.1551	10	-2.16	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0478	7.965	0.0700	8.078	0.1698	0.1551	10	-0.67	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0354	7.980	0.0190	8.078	0.1698	0.1551	10	-0.58	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0486	8.105	0.3300	8.078	0.1698	0.1551	10	0.16	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0360	8.125	0.0300	8.078	0.1698	0.1551	10	0.27	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0377	8.165	0.0300	8.078	0.1698	0.1551	10	0.51	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0233	8.167	0.1270	8.078	0.1698	0.1551	10	0.52	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0131	8.195	0.0700	8.078	0.1698	0.1551	10	0.69	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (8%)	0023	8.520	0.0600	8.078	0.1698	0.1551	10	2.60	3%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0415	7.878	0.0320	8.058	0.1990	0.1453	6	-0.90	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0105	7.880	0.0200	8.058	0.1990	0.1453	6	-0.89	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0510	8.045	0.2700	8.058	0.1990	0.1453	6	-0.07	0%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0309	8.055	0.1500	8.058	0.1990	0.1453	6	-0.02	0%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0041	8.145	0.3500	8.058	0.1990	0.1453	6	0.44	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (8%)	0169	8.375	0.0500	8.058	0.1990	0.1453	6	1.59	2%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (8%)	0035	7.760	0.2800	8.043	0.3995	0.1750	2	-0.71	2%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (8%)	0513	8.325	0.0700	8.043	0.3995	0.1750	2	0.71	2%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0105	7.795	0.2300	7.964	0.1642	0.0932	4	-1.03	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0095	7.885	0.1300	7.964	0.1642	0.0932	4	-0.48	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0029	8.000	0.0000	7.964	0.1642	0.0932	4	0.22	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (8%)	0034	8.176	0.0126	7.964	0.1642	0.0932	4	1.29	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0518	7.265*	0.0300	8.115	0.3703	0.1299	21	-2.30	5%	0
050.99	Soluble Potassium as K2O, Other (8%)	0481	7.670	0.1000	8.115	0.3703	0.1299	21	-1.20	3%	0
050.99	Soluble Potassium as K2O, Other (8%)	0506	7.695	0.1500	8.115	0.3703	0.1299	21	-1.13	3%	0
050.99	Soluble Potassium as K2O, Other (8%)	0096	7.730	0.0800	8.115	0.3703	0.1299	21	-1.04	2%	0
050.99	Soluble Potassium as K2O, Other (8%)	0457	7.735	0.0700	8.115	0.3703	0.1299	21	-1.03	2%	0
050.99	Soluble Potassium as K2O, Other (8%)	0275	7.955	0.0700	8.115	0.3703	0.1299	21	-0.43	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0105	7.985	0.0700	8.115	0.3703	0.1299	21	-0.35	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0042	8.000	0.0000	8.115	0.3703	0.1299	21	-0.31	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0177	8.070	0.0599	8.115	0.3703	0.1299	21	-0.12	0%	0
050.99	Soluble Potassium as K2O, Other (8%)	0325	8.080	0.1200	8.115	0.3703	0.1299	21	-0.10	0%	0
050.99	Soluble Potassium as K2O, Other (8%)	0394	8.080	0.0600	8.115	0.3703	0.1299	21	-0.10	0%	0
050.99	Soluble Potassium as K2O, Other (8%)	0482	8.100	0.1800	8.115	0.3703	0.1299	21	-0.04	0%	0
050.99	Soluble Potassium as K2O, Other (8%)	0389	8.195	0.0500	8.115	0.3703	0.1299	21	0.22	0%	0
050.99	Soluble Potassium as K2O, Other (8%)	0027	8.232	0.0630	8.115	0.3703	0.1299	21	0.31	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0487	8.250	0.3000	8.115	0.3703	0.1299	21	0.36	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0043	8.320	0.0400	8.115	0.3703	0.1299	21	0.55	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0234	8.340	0.1600	8.115	0.3703	0.1299	21	0.61	1%	0
050.99	Soluble Potassium as K2O, Other (8%)	0307	8.584	0.6250	8.115	0.3703	0.1299	21	1.26	3%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
050.99	Soluble Potassium as K2O, Other (8%)	0451	8.650	0.0200	8.115	0.3703	0.1299	21	1.44	3%	0
050.99	Soluble Potassium as K2O, Other (8%)	0474	8.980	0.1800	8.115	0.3703	0.1299	21	2.34	5%	0
050.99	Soluble Potassium as K2O, Other (8%)	0300	9.480	0.3000	8.115	0.3703	0.1299	21	3.69	8%	0
050.99	Soluble Potassium as K2O, Other (8%)	0260	7.835	0.6500	8.115	0.3703	0.1299	21	-0.76	2%	1
060.00	Water (Free), Vacuum Oven (%)	0007	1.165	0.0300	1.793	0.7652	0.0881	3	-0.82	18%	0
060.00	Water (Free), Vacuum Oven (%)	0416	1.568	0.0444	1.793	0.7652	0.0881	3	-0.29	6%	0
060.00	Water (Free), Vacuum Oven (%)	0096	2.645	0.1900	1.793	0.7652	0.0881	3	1.11	24%	0
060.99	Water (Free), Other (%)	0510	1.105	0.0300			0.0300	1			0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0457	6.453	0.0090	6.809	0.5038	0.0415	2	-0.71	3%	0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0105	7.165	0.0740	6.809	0.5038	0.0415	2	0.71	3%	0
101.03	Acid Soluble Calcium, AA, 965.09, test portio... (%)	0105	6.879	0.1920			0.1920	1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0035	0.7900	0.0060	6.753	0.1065	0.1465	11	-55.99	44%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	6.622	0.2040	6.753	0.1065	0.1465	11	-1.23	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0041	6.680	0.0000	6.753	0.1065	0.1465	11	-0.69	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0102	6.729	0.0260	6.753	0.1065	0.1465	11	-0.23	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	6.730	0.2800	6.753	0.1065	0.1465	11	-0.22	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0307	6.739	0.0160	6.753	0.1065	0.1465	11	-0.14	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0049	6.780	0.0800	6.753	0.1065	0.1465	11	0.25	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0474	6.790	0.1200	6.753	0.1065	0.1465	11	0.34	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0472	6.885	0.1100	6.753	0.1065	0.1465	11	1.23	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	7.040	0.5400	6.753	0.1065	0.1465	11	2.69	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	8.475	0.2300	6.753	0.1065	0.1465	11	16.16	13%	0
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0478	7.034	0.0293			0.0293	1			0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0494	6.778	0.7687			0.7687	1			0
101.99	Acid Soluble Calcium, Other (%)	0389	6.580	0.1600			0.1600	1			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0498	3.400	0.2000	3.680	0.1695	0.0882	12	-1.65	4%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0029	3.442	0.0710	3.680	0.1695	0.0882	12	-1.40	3%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0043	3.540	0.0400	3.680	0.1695	0.0882	12	-0.82	2%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0485	3.575	0.1100	3.680	0.1695	0.0882	12	-0.62	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0457	3.655	0.0300	3.680	0.1695	0.0882	12	-0.15	0%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0169	3.670	0.0200	3.680	0.1695	0.0882	12	-0.06	0%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0040	3.720	0.1000	3.680	0.1695	0.0882	12	0.24	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0481	3.755	0.0500	3.680	0.1695	0.0882	12	0.44	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0157	3.765	0.1900	3.680	0.1695	0.0882	12	0.50	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0105	3.789	0.0170	3.680	0.1695	0.0882	12	0.64	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0028	3.840	0.0400	3.680	0.1695	0.0882	12	0.95	2%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0516	4.045	0.1900	3.680	0.1695	0.0882	12	2.15	5%	0
121.02	Acid Soluble Magnesium, AA, 965.09, test port... (1.2%)	0025	4.199	0.0270			0.0270	1			0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (1.2%)	0105	3.684	0.0170			0.0170	1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0035	1.080*	0.0400	3.772	0.2169	0.0761	22	-12.41	36%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0474	2.740*	0.0000	3.772	0.2169	0.0761	22	-4.76	14%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0230	3.450	0.0800	3.772	0.2169	0.0761	22	-1.48	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0354	3.518	0.1190	3.772	0.2169	0.0761	22	-1.17	3%	0

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121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0482	3.630	0.1200	3.772	0.2169	0.0761	22	-0.65	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0324	3.645	0.1500	3.772	0.2169	0.0761	22	-0.58	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0041	3.655	0.2100	3.772	0.2169	0.0761	22	-0.54	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0096	3.680	0.0600	3.772	0.2169	0.0761	22	-0.42	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0157	3.685	0.0900	3.772	0.2169	0.0761	22	-0.40	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0102	3.723	0.0450	3.772	0.2169	0.0761	22	-0.23	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0049	3.765	0.1300	3.772	0.2169	0.0761	22	-0.03	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0433	3.781	0.0027	3.772	0.2169	0.0761	22	0.05	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0307	3.784	0.1310	3.772	0.2169	0.0761	22	0.06	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0360	3.800	0.0400	3.772	0.2169	0.0761	22	0.13	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0220	3.805	0.0100	3.772	0.2169	0.0761	22	0.15	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0234	3.875	0.0100	3.772	0.2169	0.0761	22	0.48	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0233	3.893	0.2270	3.772	0.2169	0.0761	22	0.56	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0231	4.120	0.0400	3.772	0.2169	0.0761	22	1.61	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0371	4.200	0.0400	3.772	0.2169	0.0761	22	1.98	6%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0452	4.270	0.0200	3.772	0.2169	0.0761	22	2.30	7%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0483	4.430	0.0000	3.772	0.2169	0.0761	22	3.04	9%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0472	5.465	0.1100	3.772	0.2169	0.0761	22	7.81	22%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0394	3.300*	0.2000	3.581	0.2556	0.1748	3	-1.10	4%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0478	3.642	0.2044	3.581	0.2556	0.1748	3	0.24	1%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0055	3.800	0.1200	3.581	0.2556	0.1748	3	0.86	3%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0515	3.369	0.1054	3.696	0.2368	0.0948	6	-1.38	4%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0117	3.425	0.1100	3.696	0.2368	0.0948	6	-1.15	4%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0034	3.709	0.0260	3.696	0.2368	0.0948	6	0.05	0%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0023	3.797	0.0110	3.696	0.2368	0.0948	6	0.42	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0177	3.831	0.0718	3.696	0.2368	0.0948	6	0.57	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0494	3.950	0.2445	3.696	0.2368	0.0948	6	1.07	3%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0506	3.325*	0.1700	3.632	0.2413	0.3264	4	-1.27	4%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0515	3.640	0.0864	3.632	0.2413	0.3264	4	0.03	0%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0512	3.650	1.019	3.632	0.2413	0.3264	4	0.07	0%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0389	3.915	0.0300	3.632	0.2413	0.3264	4	1.17	4%	0
131.00	Water Soluble Magnesium, AA (%)	0029	1.085	0.0470	1.897	1.303	0.0923	3	-0.62	21%	0
131.00	Water Soluble Magnesium, AA (%)	0485	1.205	0.0300	1.897	1.303	0.0923	3	-0.53	18%	0
131.00	Water Soluble Magnesium, AA (%)	0498	3.400	0.2000	1.897	1.303	0.0923	3	1.15	40%	0
131.30	Water Soluble Magnesium, ICP (%)	0394	0.8850	0.0500	1.170	0.0757	0.0357	6	-3.77	12%	0
131.30	Water Soluble Magnesium, ICP (%)	0231	1.120	0.0400	1.170	0.0757	0.0357	6	-0.66	2%	0
131.30	Water Soluble Magnesium, ICP (%)	0275	1.150	0.1000	1.170	0.0757	0.0357	6	-0.27	1%	0
131.30	Water Soluble Magnesium, ICP (%)	0230	1.200	0.0000	1.170	0.0757	0.0357	6	0.39	1%	0
131.30	Water Soluble Magnesium, ICP (%)	0220	1.205	0.0100	1.170	0.0757	0.0357	6	0.46	1%	0
131.30	Water Soluble Magnesium, ICP (%)	0027	1.266	0.0140	1.170	0.0757	0.0357	6	1.27	4%	0
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0510	2.455	0.0100			0.0100	1			0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0055	9.095	0.2300	9.208	0.1591	0.3850	2	-0.71	1%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0114	9.320	0.5400	9.208	0.1591	0.3850	2	0.71	1%	0

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143.99	Elemental Sulfur, Other (%)	0389	9.330	0.0200			0.0200	1			0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0405	8.705	0.0100	8.904	0.2135	0.1240	5	-0.93	1%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0397	8.790	0.3800	8.904	0.2135	0.1240	5	-0.53	1%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0027	8.850	0.1000	8.904	0.2135	0.1240	5	-0.25	0%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0485	8.915	0.0100	8.904	0.2135	0.1240	5	0.05	0%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0043	9.260	0.1200	8.904	0.2135	0.1240	5	1.67	2%	0
146.00	Total Sulfur in Liquid, Gravimetric - sulfate... (%)	0292	9.735	0.0100			0.0100	1			0
148.00	Total Sulfur, Combustion (5.5%)	0474	3.953*	0.0220	8.605	0.6298	0.1705	6	-7.39	27%	0
148.00	Total Sulfur, Combustion (5.5%)	0157	8.255	0.2500	8.605	0.6298	0.1705	6	-0.56	2%	0
148.00	Total Sulfur, Combustion (5.5%)	0360	8.445	0.2300	8.605	0.6298	0.1705	6	-0.25	1%	0
148.00	Total Sulfur, Combustion (5.5%)	0025	8.862	0.0020	8.605	0.6298	0.1705	6	0.41	1%	0
148.00	Total Sulfur, Combustion (5.5%)	0451	9.055	0.0700	8.605	0.6298	0.1705	6	0.71	3%	0
148.00	Total Sulfur, Combustion (5.5%)	0029	9.252	0.4490	8.605	0.6298	0.1705	6	1.03	4%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0230	7.795*	0.3500	8.822	0.1859	0.1455	11	-5.52	6%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0029	8.645	0.0700	8.822	0.1859	0.1455	11	-0.95	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0157	8.735	0.0900	8.822	0.1859	0.1455	11	-0.47	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0405	8.745	0.0100	8.822	0.1859	0.1455	11	-0.41	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0040	8.750	0.1000	8.822	0.1859	0.1455	11	-0.39	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0102	8.792	0.0300	8.822	0.1859	0.1455	11	-0.16	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0457	8.855	0.4700	8.822	0.1859	0.1455	11	0.18	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0485	8.915	0.0100	8.822	0.1859	0.1455	11	0.50	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0481	8.930	0.0000	8.822	0.1859	0.1455	11	0.58	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0105	9.205	0.1700	8.822	0.1859	0.1455	11	2.06	2%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5.5%)	0095	9.800	0.3000	8.822	0.1859	0.1455	11	5.26	6%	0
148.04	Total Sulfur, ICP, w/Br digestion (5.5%)	0394	7.265*	0.1900			0.1900	1			0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0486	7.510*	0.0400	8.785	1.113	0.3218	9	-1.15	7%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0515	7.636*	0.2960	8.785	1.113	0.3218	9	-1.03	7%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0117	7.690*	0.4800	8.785	1.113	0.3218	9	-0.98	6%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0478	8.810	0.3613	8.785	1.113	0.3218	9	0.02	0%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0023	8.975	0.1530	8.785	1.113	0.3218	9	0.17	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0177	9.073	0.0185	8.785	1.113	0.3218	9	0.26	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0102	9.306	0.1120	8.785	1.113	0.3218	9	0.47	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0483	9.860	1.080	8.785	1.113	0.3218	9	0.97	6%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5.5%)	0494	10.20	0.3555	8.785	1.113	0.3218	9	1.28	8%	0
148.99	Total Sulfur, Other (5.5%)	0506	7.095*	0.3500	8.958	0.7133	0.1091	7	-2.61	10%	0
148.99	Total Sulfur, Other (5.5%)	0354	8.524	0.2280	8.958	0.7133	0.1091	7	-0.61	2%	0
148.99	Total Sulfur, Other (5.5%)	0096	8.595	0.0100	8.958	0.7133	0.1091	7	-0.51	2%	0
148.99	Total Sulfur, Other (5.5%)	0307	8.945	0.0860	8.958	0.7133	0.1091	7	-0.02	0%	0
148.99	Total Sulfur, Other (5.5%)	0220	9.315	0.0300	8.958	0.7133	0.1091	7	0.50	2%	0
148.99	Total Sulfur, Other (5.5%)	0452	9.520	0.0200	8.958	0.7133	0.1091	7	0.79	3%	0
148.99	Total Sulfur, Other (5.5%)	0482	9.800	0.0400	8.958	0.7133	0.1091	7	1.18	5%	0
151.00	Acid Soluble Arsenic , AA, test portion as i... (ppm)	0136	2.750	0.1000			0.1000	1			0
151.30	Acid Soluble Arsenic , ICP (ppm)	0102	1.387	0.2730	2.647	1.105	0.1786	5	-1.14	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				
151.30	Acid Soluble Arsenic , ICP (ppm)	0394	2.225	0.0500	2.647	1.105	0.1786	5	-0.38	8%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0230	2.475	0.0700	2.647	1.105	0.1786	5	-0.16	3%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0096	2.750	0.1000	2.647	1.105	0.1786	5	0.09	2%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0474	4.400	0.4000	2.647	1.105	0.1786	5	1.59	33%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified... (ppm)	0515	0.7944	1.345	2.145	1.910	0.7426	2	-0.71	31%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified... (ppm)	0494	3.496	0.1398	2.145	1.910	0.7426	2	0.71	31%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified... (ppm)	0478	1.278	2.555	2.145	1.910	0.7426	2	-0.45	20%	4
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	1.768	0.1300	1.809	0.0580	0.6150	2	-0.71	1%	0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0220	1.850	1.100	1.809	0.0580	0.6150	2	0.71	1%	0
151.99	Acid Soluble Arsenic , Other (ppm)	0481	2.555	0.0700			0.0700	1			0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0055	0.0140	0.0000	0.0202	0.0048	0.0004	7	-1.28	15%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0220	0.0170	0.0000	0.0202	0.0048	0.0004	7	-0.66	8%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0498	0.0180	0.0000	0.0202	0.0048	0.0004	7	-0.46	5%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0506	0.0200	0.0000	0.0202	0.0048	0.0004	7	-0.04	1%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0029	0.0225	0.0010	0.0202	0.0048	0.0004	7	0.47	6%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0481	0.0235	0.0010	0.0202	0.0048	0.0004	7	0.68	8%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0397	0.0265	0.0010	0.0202	0.0048	0.0004	7	1.30	16%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0105	0.0310	0.0060	0.0202	0.0048	0.0004	7	2.23	27%	1
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0394	0.0160	0.0000	0.0201	0.0040	0.0013	10	-1.03	10%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0494	0.0163	0.0003	0.0201	0.0040	0.0013	10	-0.97	10%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0485	0.0171	0.0003	0.0201	0.0040	0.0013	10	-0.77	8%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0452	0.0180	0.0000	0.0201	0.0040	0.0013	10	-0.53	5%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0025	0.0186	0.0026	0.0201	0.0040	0.0013	10	-0.38	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0324	0.0205	0.0030	0.0201	0.0040	0.0013	10	0.09	1%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0389	0.0215	0.0018	0.0201	0.0040	0.0013	10	0.34	3%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0433	0.0227	0.0004	0.0201	0.0040	0.0013	10	0.64	6%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0354	0.0250	0.0040	0.0201	0.0040	0.0013	10	1.21	12%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.02%)	0402	0.0544	0.0008	0.0201	0.0040	0.0013	10	8.51	85%	0
165.99	Acid Soluble Boron , Other (0.02%)	0230	0.0139*	0.0003	0.0189	0.0045	0.0014	11	-1.10	13%	0
165.99	Acid Soluble Boron , Other (0.02%)	0457	0.0145	0.0010	0.0189	0.0045	0.0014	11	-0.96	12%	0
165.99	Acid Soluble Boron , Other (0.02%)	0117	0.0159	0.0004	0.0189	0.0045	0.0014	11	-0.65	8%	0
165.99	Acid Soluble Boron , Other (0.02%)	0486	0.0160	0.0000	0.0189	0.0045	0.0014	11	-0.63	8%	0
165.99	Acid Soluble Boron , Other (0.02%)	0515	0.0160	0.0000	0.0189	0.0045	0.0014	11	-0.63	8%	0
165.99	Acid Soluble Boron , Other (0.02%)	0360	0.0200	0.0000	0.0189	0.0045	0.0014	11	0.25	3%	0
165.99	Acid Soluble Boron , Other (0.02%)	0472	0.0200	0.0000	0.0189	0.0045	0.0014	11	0.25	3%	0
165.99	Acid Soluble Boron , Other (0.02%)	0482	0.0200	0.0000	0.0189	0.0045	0.0014	11	0.25	3%	0
165.99	Acid Soluble Boron , Other (0.02%)	0231	0.0205	0.0010	0.0189	0.0045	0.0014	11	0.36	4%	0
165.99	Acid Soluble Boron , Other (0.02%)	0095	0.0250	0.0100	0.0189	0.0045	0.0014	11	1.36	16%	0
165.99	Acid Soluble Boron , Other (0.02%)	0043	0.0335	0.0030	0.0189	0.0045	0.0014	11	3.23	39%	0
165.99	Acid Soluble Boron , Other (0.02%)	0483	0.0873	0.0249	0.0189	0.0045	0.0014	11	15.10	181%	1
181.00	Acid Soluble Cadmium , AA, test portion as i... (ppm)	0136	0.8000	0.0000			0.0000	1			0
181.30	Acid Soluble Cadmium , ICP (ppm)	0474	0.5850	0.0500	1.452	1.521	0.0446	5	-0.57	30%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	0.8000	0.0000	1.452	1.521	0.0446	5	-0.43	22%	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)	0102	0.8525	0.0410	1.452	1.521	0.0446	5	-0.39	21%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0230	0.8550	0.0020	1.452	1.521	0.0446	5	-0.39	21%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0035	4.165	0.1300	1.452	1.521	0.0446	5	1.78	93%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0494	0.9397	0.0449	1.648	0.8100	0.3483	3	-0.87	21%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0478	1.473	0.3400	1.648	0.8100	0.3483	3	-0.22	5%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0515	2.531	0.6600	1.648	0.8100	0.3483	3	1.09	27%	0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	0.8001	0.0103	1.150	0.4949	0.3052	2	-0.71	15%	0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0220	1.500	0.6000	1.150	0.4949	0.3052	2	0.71	15%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0481	0.5800	0.0400	0.8200	0.3394	0.0400	2	-0.71	15%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0498	1.060	0.0400	0.8200	0.3394	0.0400	2	0.71	15%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0220	3.860*	0.0800	4.740	0.2762	0.1004	14	-3.18	9%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0481	4.460	0.1600	4.740	0.2762	0.1004	14	-1.01	3%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0102	4.483	0.0260	4.740	0.2762	0.1004	14	-0.93	3%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0498	4.550	0.1000	4.740	0.2762	0.1004	14	-0.69	2%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0055	4.650	0.1000	4.740	0.2762	0.1004	14	-0.32	1%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0494	4.650	0.0400	4.740	0.2762	0.1004	14	-0.32	1%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0043	4.705	0.0900	4.740	0.2762	0.1004	14	-0.13	0%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0105	4.730	0.0200	4.740	0.2762	0.1004	14	-0.03	0%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0029	4.770	0.0000	4.740	0.2762	0.1004	14	0.11	0%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0028	4.840	0.1000	4.740	0.2762	0.1004	14	0.36	1%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0394	4.890	0.2000	4.740	0.2762	0.1004	14	0.54	2%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0513	5.095	0.0100	4.740	0.2762	0.1004	14	1.29	4%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0506	5.480	0.3600	4.740	0.2762	0.1004	14	2.68	8%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0397	5.730	0.1200	4.740	0.2762	0.1004	14	3.59	10%	0
190.00	Water Soluble Chlorine, Titrimetric (6%)	0230	5.645	1.610	4.740	0.2762	0.1004	14	3.28	10%	1
190.99	Water Soluble Chlorine, Other (6%)	0029	4.280	0.1400			0.1400	1			0
191.30	Acid Soluble Chromium , ICP (ppm)	0474	64.00	2.000	128.2	23.44	2.717	7	-2.74	25%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	90.15	4.100	128.2	23.44	2.717	7	-1.62	15%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	119.5	3.000	128.2	23.44	2.717	7	-0.37	3%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0230	133.5	3.000	128.2	23.44	2.717	7	0.22	2%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	142.0	2.000	128.2	23.44	2.717	7	0.59	5%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0102	142.9	0.2190	128.2	23.44	2.717	7	0.63	6%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	155.0	4.700	128.2	23.44	2.717	7	1.14	10%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0478	142.2	16.00	147.2	4.570	9.018	3	-1.10	2%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0515	148.4	3.099	147.2	4.570	9.018	3	0.26	0%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0494	151.1	7.960	147.2	4.570	9.018	3	0.85	1%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0515	150.8	7.926	150.9	0.1450	11.96	2	-0.71	0%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0220	151.0	16.00	150.9	0.1450	11.96	2	0.71	0%	0
191.99	Acid Soluble Chromium , Other (ppm)	0512	83.46	31.66	125.8	36.90	11.89	3	-1.15	17%	0
191.99	Acid Soluble Chromium , Other (ppm)	0506	143.0	0.0000	125.8	36.90	11.89	3	0.47	7%	0
191.99	Acid Soluble Chromium , Other (ppm)	0481	151.0	4.000	125.8	36.90	11.89	3	0.68	10%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0035	5.620	0.0400	12.38	3.902	0.2868	6	-1.73	27%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0102	10.45	0.6210	12.38	3.902	0.2868	6	-0.49	8%	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)	0230	12.00	0.4000	12.38	3.902	0.2868	6	-0.10	2%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	12.70	0.0000	12.38	3.902	0.2868	6	0.08	1%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	15.15	0.1000	12.38	3.902	0.2868	6	0.71	11%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	16.85	0.5600	12.38	3.902	0.2868	6	1.15	18%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0515	8.254	0.7246	13.19	4.278	2.083	3	-1.15	19%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0494	15.54	1.408	13.19	4.278	2.083	3	0.55	9%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0478	15.78	4.116	13.19	4.278	2.083	3	0.61	10%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	8.692	0.3040	11.07	3.364	1.302	2	-0.71	11%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0220	13.45	2.300	11.07	3.364	1.302	2	0.71	11%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0512	9.705	2.090	10.67	1.358	3.420	2	-0.71	5%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0506	11.63	4.750	10.67	1.358	3.420	2	0.71	5%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0481	0.0580	0.0000	0.0688	0.0048	0.0019	10	-2.24	8%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0029	0.0613	0.0015	0.0688	0.0048	0.0019	10	-1.56	5%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0043	0.0643	0.0015	0.0688	0.0048	0.0019	10	-0.94	3%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0498	0.0660	0.0020	0.0688	0.0048	0.0019	10	-0.58	2%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0485	0.0699	0.0037	0.0688	0.0048	0.0019	10	0.22	1%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0105	0.0706	0.0018	0.0688	0.0048	0.0019	10	0.37	1%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0040	0.0707	0.0008	0.0688	0.0048	0.0019	10	0.39	1%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0516	0.0715	0.0010	0.0688	0.0048	0.0019	10	0.56	2%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0028	0.0721	0.0039	0.0688	0.0048	0.0019	10	0.67	2%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0513	0.1415	0.0030	0.0688	0.0048	0.0019	10	15.07	53%	0
221.03	Acid Soluble Copper , AA, 965.09, test porti... (0.05%)	0023	0.0685	0.0010	0.0689	0.0006	0.0007	2	-0.71	0%	0
221.03	Acid Soluble Copper , AA, 965.09, test porti... (0.05%)	0105	0.0694	0.0003	0.0689	0.0006	0.0007	2	0.71	0%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0035	0.0031*	0.0001	0.0688	0.0042	0.0016	22	-15.57	48%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0230	0.0553*	0.0007	0.0688	0.0042	0.0016	22	-3.20	10%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0041	0.0630	0.0000	0.0688	0.0042	0.0016	22	-1.36	4%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0027	0.0645	0.0050	0.0688	0.0042	0.0016	22	-1.01	3%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0324	0.0650	0.0020	0.0688	0.0042	0.0016	22	-0.89	3%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0049	0.0655	0.0050	0.0688	0.0042	0.0016	22	-0.77	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0307	0.0660	0.0028	0.0688	0.0042	0.0016	22	-0.65	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0452	0.0660	0.0000	0.0688	0.0042	0.0016	22	-0.65	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0354	0.0685	0.0050	0.0688	0.0042	0.0016	22	-0.06	0%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0402	0.0687	0.0013	0.0688	0.0042	0.0016	22	-0.02	0%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0360	0.0695	0.0010	0.0688	0.0042	0.0016	22	0.18	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0095	0.0700	0.0000	0.0688	0.0042	0.0016	22	0.30	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0231	0.0700	0.0040	0.0688	0.0042	0.0016	22	0.30	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0371	0.0700	0.0000	0.0688	0.0042	0.0016	22	0.30	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0472	0.0700	0.0000	0.0688	0.0042	0.0016	22	0.30	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0482	0.0700	0.0000	0.0688	0.0042	0.0016	22	0.30	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0433	0.0709	0.0002	0.0688	0.0042	0.0016	22	0.51	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0233	0.0716	0.0004	0.0688	0.0042	0.0016	22	0.68	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0096	0.0718	0.0008	0.0688	0.0042	0.0016	22	0.72	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0474	0.0745	0.0010	0.0688	0.0042	0.0016	22	1.36	4%	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... (0.05%)	0102	0.0765	0.0010	0.0688	0.0042	0.0016	22	1.84	6%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0483	0.0769	0.0048	0.0688	0.0042	0.0016	22	1.93	6%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0114	522.0	14.00	0.0688	0.0042	0.0016	22	123726.39	379586%	2
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0055	0.0619	0.0007	0.0630	0.0019	0.0013	3	-0.62	1%	0
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0394	0.0620	0.0020	0.0630	0.0019	0.0013	3	-0.54	1%	0
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0478	0.0653	0.0013	0.0630	0.0019	0.0013	3	1.15	2%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0515	0.0647	0.0009	0.0679	0.0033	0.0019	5	-1.01	2%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0117	0.0652	0.0027	0.0679	0.0033	0.0019	5	-0.85	2%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0220	0.0675	0.0030	0.0679	0.0033	0.0019	5	-0.13	0%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0486	0.0700	0.0000	0.0679	0.0033	0.0019	5	0.64	2%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0494	0.0724	0.0027	0.0679	0.0033	0.0019	5	1.36	3%	0
221.99	Acid Soluble Copper , Other (0.05%)	0506	0.0500*	0.0400	0.0616	0.0083	0.0135	4	-1.40	9%	0
221.99	Acid Soluble Copper , Other (0.05%)	0512	0.0613	0.0083	0.0616	0.0083	0.0135	4	-0.04	0%	0
221.99	Acid Soluble Copper , Other (0.05%)	0389	0.0674	0.0022	0.0616	0.0083	0.0135	4	0.70	5%	0
221.99	Acid Soluble Copper , Other (0.05%)	0515	0.0678	0.0036	0.0616	0.0083	0.0135	4	0.75	5%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0513	0.7400*	0.0200	1.227	0.1892	0.0506	10	-2.57	20%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0457	1.025*	0.0060	1.227	0.1892	0.0506	10	-1.07	8%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0516	1.055*	0.0700	1.227	0.1892	0.0506	10	-0.91	7%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0498	1.150	0.1000	1.227	0.1892	0.0506	10	-0.40	3%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0481	1.250	0.0600	1.227	0.1892	0.0506	10	0.12	1%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0169	1.305	0.0500	1.227	0.1892	0.0506	10	0.41	3%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0028	1.315	0.0700	1.227	0.1892	0.0506	10	0.47	4%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0043	1.330	0.0200	1.227	0.1892	0.0506	10	0.55	4%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0105	1.425	0.0960	1.227	0.1892	0.0506	10	1.05	8%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	0485	1.439	0.0140	1.227	0.1892	0.0506	10	1.12	9%	0
241.03	Acid Soluble Iron , AA, 965.09, test portion ... (0.5%)	0105	1.406	0.0000			0.0000	1			0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0474	0.6150*	0.0500	1.326	0.1299	0.0535	20	-5.47	27%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0472	1.005*	0.1100	1.326	0.1299	0.0535	20	-2.47	12%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0230	1.070*	0.0200	1.326	0.1299	0.0535	20	-1.97	10%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0482	1.190	0.0400	1.326	0.1299	0.0535	20	-1.04	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0234	1.215	0.1300	1.326	0.1299	0.0535	20	-0.85	4%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0102	1.241	0.0860	1.326	0.1299	0.0535	20	-0.65	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0402	1.246	0.0070	1.326	0.1299	0.0535	20	-0.62	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0041	1.270	0.0600	1.326	0.1299	0.0535	20	-0.43	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0035	1.280	0.0600	1.326	0.1299	0.0535	20	-0.35	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0157	1.365	0.0100	1.326	0.1299	0.0535	20	0.30	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0049	1.375	0.1100	1.326	0.1299	0.0535	20	0.38	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0095	1.380	0.0400	1.326	0.1299	0.0535	20	0.42	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0354	1.382	0.0530	1.326	0.1299	0.0535	20	0.43	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0096	1.390	0.0400	1.326	0.1299	0.0535	20	0.50	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0231	1.410	0.0200	1.326	0.1299	0.0535	20	0.65	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0433	1.412	0.0634	1.326	0.1299	0.0535	20	0.66	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0360	1.435	0.0300	1.326	0.1299	0.0535	20	0.84	4%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0452	1.455	0.0100	1.326	0.1299	0.0535	20	1.00	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0324	1.470	0.0400	1.326	0.1299	0.0535	20	1.11	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0483	1.635	0.0900	1.326	0.1299	0.0535	20	2.38	12%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.5%)	0114	13,930	556.0	1.326	0.1299	0.0535	20	107237.03	525386%	2
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0025	0.6062*	0.0097	1.143	0.4904	0.0129	3	-1.09	23%	0
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0394	1.255	0.0100	1.143	0.4904	0.0129	3	0.23	5%	0
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0055	1.568	0.0190	1.143	0.4904	0.0129	3	0.87	19%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0486	1.030*	0.0600	1.310	0.1561	0.0493	8	-1.80	11%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0023	1.038*	0.0680	1.310	0.1561	0.0493	8	-1.75	10%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0515	1.236	0.0732	1.310	0.1561	0.0493	8	-0.48	3%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0478	1.296	0.0308	1.310	0.1561	0.0493	8	-0.09	1%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0220	1.375	0.0100	1.310	0.1561	0.0493	8	0.41	2%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0034	1.421	0.0080	1.310	0.1561	0.0493	8	0.71	4%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0177	1.425	0.0106	1.310	0.1561	0.0493	8	0.73	4%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.5%)	0494	1.481	0.1338	1.310	0.1561	0.0493	8	1.09	6%	0
241.99	Acid Soluble Iron , Other (0.5%)	0512	0.5192*	0.0393	0.9982	0.3436	0.1256	4	-1.39	24%	0
241.99	Acid Soluble Iron , Other (0.5%)	0515	0.9788*	0.2532	0.9982	0.3436	0.1256	4	-0.06	1%	0
241.99	Acid Soluble Iron , Other (0.5%)	0389	1.240	0.0600	0.9982	0.3436	0.1256	4	0.70	12%	0
241.99	Acid Soluble Iron , Other (0.5%)	0506	1.255	0.1500	0.9982	0.3436	0.1256	4	0.75	13%	0
251.00	Acid Soluble Lead , AA, test portion as in 2... (ppm)	0136	6.500	1.000			1.000	1			0
251.30	Acid Soluble Lead , ICP (ppm)	0035	5.845	1.090	6.800	0.9985	0.5144	7	-0.96	7%	0
251.30	Acid Soluble Lead , ICP (ppm)	0230	6.040	0.0800	6.800	0.9985	0.5144	7	-0.76	6%	0
251.30	Acid Soluble Lead , ICP (ppm)	0389	6.100	1.000	6.800	0.9985	0.5144	7	-0.70	5%	0
251.30	Acid Soluble Lead , ICP (ppm)	0394	6.510	0.2200	6.800	0.9985	0.5144	7	-0.29	2%	0
251.30	Acid Soluble Lead , ICP (ppm)	0096	7.450	0.5000	6.800	0.9985	0.5144	7	0.65	5%	0
251.30	Acid Soluble Lead , ICP (ppm)	0102	7.667	0.1110	6.800	0.9985	0.5144	7	0.87	6%	0
251.30	Acid Soluble Lead , ICP (ppm)	0474	8.800	0.6000	6.800	0.9985	0.5144	7	2.00	15%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0494	8.115	0.6597	6.800	0.9985	0.6597	1	1.32	10%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0478	4.312	8.623	6.800	0.9985	0.6597	1	-2.49	18%	4
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0515	4.433	8.865	6.800	0.9985	0.6597	1	-2.37	17%	4
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	9.287	0.1770	9.368	0.1156	0.6385	2	-0.71	0%	0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0220	9.450	1.100	9.368	0.1156	0.6385	2	0.71	0%	0
251.99	Acid Soluble Lead , Other (ppm)	0498	1.105	0.0500	29.28	48.28	0.7675	4	-0.58	48%	0
251.99	Acid Soluble Lead , Other (ppm)	0481	5.000	0.0000	29.28	48.28	0.7675	4	-0.50	41%	0
251.99	Acid Soluble Lead , Other (ppm)	0506	9.500	0.0000	29.28	48.28	0.7675	4	-0.41	34%	0
251.99	Acid Soluble Lead , Other (ppm)	0512	101.5	3.020	29.28	48.28	0.7675	4	1.50	123%	0
261.00	Acid Soluble Manganese , AA, Mn2+ only (0.06%)	0043	0.2240	0.0080	0.2290	0.0071	0.0070	2	-0.71	1%	0
261.00	Acid Soluble Manganese , AA, Mn2+ only (0.06%)	0028	0.2340	0.0060	0.2290	0.0071	0.0070	2	0.71	1%	0
261.11	Acid Soluble Manganese , AA, total Mn (0.06%)	0498	0.1700*	0.0200	0.1900	0.0283	0.0100	2	-0.71	5%	0
261.11	Acid Soluble Manganese , AA, total Mn (0.06%)	0481	0.2100	0.0000	0.1900	0.0283	0.0100	2	0.71	5%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.06%)	0513	0.2190	0.0080	0.2295	0.0092	0.0086	6	-1.14	2%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.06%)	0457	0.2215	0.0050	0.2295	0.0092	0.0086	6	-0.87	2%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.06%)	0029	0.2301	0.0269	0.2295	0.0092	0.0086	6	0.06	0%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.06%)	0040	0.2305	0.0070	0.2295	0.0092	0.0086	6	0.10	0%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.06%)	0485	0.2360	0.0020	0.2295	0.0092	0.0086	6	0.70	1%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.06%)	0105	0.2402	0.0027	0.2295	0.0092	0.0086	6	1.15	2%	0
261.15	Acid Soluble Manganese , AA, 965.09, test po... (0.06%)	0478	0.2116	0.0090	0.2196	0.0112	0.0075	2	-0.71	2%	0
261.15	Acid Soluble Manganese , AA, 965.09, test po... (0.06%)	0105	0.2275	0.0060	0.2196	0.0112	0.0075	2	0.71	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0035	0.0143*	0.0002	0.2238	0.0064	0.0018	8	-32.81	47%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0041	0.2200	0.0000	0.2238	0.0064	0.0018	8	-0.60	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0452	0.2200	0.0000	0.2238	0.0064	0.0018	8	-0.60	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0354	0.2220	0.0020	0.2238	0.0064	0.0018	8	-0.28	0%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0472	0.2250	0.0100	0.2238	0.0064	0.0018	8	0.19	0%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0433	0.2278	0.0007	0.2238	0.0064	0.0018	8	0.62	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0096	0.2287	0.0006	0.2238	0.0064	0.0018	8	0.77	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0102	0.2335	0.0010	0.2238	0.0064	0.0018	8	1.52	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0114	2,172	103.0	0.2238	0.0064	0.0018	8	340028.11	485079%	2
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0230	0.1790*	0.0060	0.2255	0.0297	0.0094	5	-1.57	10%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0234	0.2150	0.0100	0.2255	0.0297	0.0094	5	-0.35	2%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0360	0.2385	0.0190	0.2255	0.0297	0.0094	5	0.44	3%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0324	0.2400	0.0020	0.2255	0.0297	0.0094	5	0.49	3%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.06%)	0482	0.2550	0.0100	0.2255	0.0297	0.0094	5	0.99	7%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.06%)	0049	0.2100	0.0200	0.2353	0.0117	0.0117	6	-2.17	5%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.06%)	0402	0.2273	0.0011	0.2353	0.0117	0.0117	6	-0.69	2%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.06%)	0233	0.2323	0.0000	0.2353	0.0117	0.0117	6	-0.26	1%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.06%)	0231	0.2400	0.0000	0.2353	0.0117	0.0117	6	0.40	1%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.06%)	0055	0.2401	0.0302	0.2353	0.0117	0.0117	6	0.41	1%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.06%)	0483	0.2515	0.0190	0.2353	0.0117	0.0117	6	1.39	3%	0
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0394	0.1950*	0.0100	0.2225	0.0389	0.0088	2	-0.71	6%	0
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0025	0.2500	0.0076	0.2225	0.0389	0.0088	2	0.71	6%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0486	0.1850*	0.0100	0.2184	0.0118	0.0053	8	-2.82	8%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0117	0.1995	0.0130	0.2184	0.0118	0.0053	8	-1.60	4%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0515	0.2080	0.0058	0.2184	0.0118	0.0053	8	-0.88	2%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0474	0.2200	0.0000	0.2184	0.0118	0.0053	8	0.14	0%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0220	0.2240	0.0000	0.2184	0.0118	0.0053	8	0.48	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0023	0.2245	0.0050	0.2184	0.0118	0.0053	8	0.52	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0034	0.2245	0.0010	0.2184	0.0118	0.0053	8	0.52	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.06%)	0494	0.2339	0.0079	0.2184	0.0118	0.0053	8	1.31	4%	0
261.99	Acid Soluble Manganese , Other (0.06%)	0512	0.1956*	0.0267	0.2124	0.0132	0.0106	5	-1.27	4%	0
261.99	Acid Soluble Manganese , Other (0.06%)	0515	0.2058	0.0054	0.2124	0.0132	0.0106	5	-0.50	2%	0
261.99	Acid Soluble Manganese , Other (0.06%)	0389	0.2105	0.0010	0.2124	0.0132	0.0106	5	-0.14	0%	0
261.99	Acid Soluble Manganese , Other (0.06%)	0506	0.2200	0.0200	0.2124	0.0132	0.0106	5	0.58	2%	0
261.99	Acid Soluble Manganese , Other (0.06%)	0095	0.2300	0.0000	0.2124	0.0132	0.0106	5	1.33	4%	0
281.00	Acid Soluble Mercury , AA (ppm)	0230	0.2225	0.0650			0.0650	1			0
281.30	Acid Soluble Mercury , ICP (ppm)	0394	0.2190	0.0300	0.2124	0.0132	0.0300	1	0.50	2%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0000	0.0000	0.2124	0.0132	0.0300	1	-16.07	50%	4

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				
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0394	6.000*	0.0000	10.67	3.672	0.2986	9	-1.27	22%	0
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0474	6.150*	0.3000	10.67	3.672	0.2986	9	-1.23	21%	0
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0035	6.795	0.1900	10.67	3.672	0.2986	9	-1.06	18%	0
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0049	9.510	0.9200	10.67	3.672	0.2986	9	-0.32	5%	0
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0096	11.80	0.6000	10.67	3.672	0.2986	9	0.31	5%	0
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0230	12.60	0.0000	10.67	3.672	0.2986	9	0.53	9%	0
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0102	13.71	0.3640	10.67	3.672	0.2986	9	0.83	14%	0
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0452	14.03	0.0400	10.67	3.672	0.2986	9	0.91	16%	0
289.30	Acid Soluble Molybdenum , ICP (5ppm)	0433	14.06	0.2734	10.67	3.672	0.2986	9	0.92	16%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (5ppm)	0486	0.0012*	0.0001	8.394	6.411	0.9593	5	-1.31	50%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (5ppm)	0478	3.158*	0.1460	8.394	6.411	0.9593	5	-0.82	31%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (5ppm)	0220	12.00	2.000	8.394	6.411	0.9593	5	0.56	21%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (5ppm)	0515	12.13	1.055	8.394	6.411	0.9593	5	0.58	22%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (5ppm)	0494	14.69	1.596	8.394	6.411	0.9593	5	0.98	37%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (5ppm)	0220	10.65	0.7000	11.72	1.506	0.6105	2	-0.71	5%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (5ppm)	0515	12.78	0.5210	11.72	1.506	0.6105	2	0.71	5%	0
289.99	Acid Soluble Molybdenum , Other (5ppm)	0506	21.40	7.200			7.200	1			0
291.00	Acid Soluble Nickel , AA, test portion as in... (ppm)	0136	73.50	1.000			1.000	1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0474	25.00	2.000	52.10	23.40	0.9848	6	-1.16	26%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	29.30	0.8000	52.10	23.40	0.9848	6	-0.97	22%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0394	53.60	0.4000	52.10	23.40	0.9848	6	0.06	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0230	60.55	0.5000	52.10	23.40	0.9848	6	0.36	8%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0102	70.81	0.1090	52.10	23.40	0.9848	6	0.80	18%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0096	73.35	2.100	52.10	23.40	0.9848	6	0.91	20%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	56.20	9.000	52.10	23.40	0.9848	6	0.18	4%	1
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0515	67.59	0.0325	68.73	1.127	2.047	3	-1.02	1%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0478	68.77	2.255	68.73	1.127	2.047	3	0.04	0%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0494	69.84	3.852	68.73	1.127	2.047	3	0.98	1%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0220	72.50	7.000	72.66	0.2234	5.338	2	-0.71	0%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	72.82	3.676	72.66	0.2234	5.338	2	0.71	0%	0
291.99	Acid Soluble Nickel , Other (ppm)	0512	24.16	3.060	53.72	25.99	1.687	3	-1.14	28%	0
291.99	Acid Soluble Nickel , Other (ppm)	0481	64.00	2.000	53.72	25.99	1.687	3	0.40	10%	0
291.99	Acid Soluble Nickel , Other (ppm)	0506	73.00	0.0000	53.72	25.99	1.687	3	0.74	18%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0230	0.0000	0.0000			0.0000	0			4
301.33	Acid Soluble Selenium , ICP, 2006.03 modifie... (ppm)	0515	0.0000	0.0000			0.0000	0			4
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0515	0.0721	0.1441			0.1441	0			4
301.99	Acid Soluble Selenium , Other (ppm)	0485	0.3600	0.0480			0.0480	1			0
311.00	Sodium, AA (%)	0043	0.1600	0.0040			0.0040	1			0
311.30	Sodium, Flame Photometric (%)	0510	0.2000	0.0000			0.0000	1			0
311.32	Sodium, ICP, 2006.03 test portion (%)	0474	0.1800	0.0000			0.0000	1			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0494	0.1708	0.0090	0.2061	0.0570	0.0072	3	-0.62	9%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0102	0.1755	0.0030	0.2061	0.0570	0.0072	3	-0.54	7%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0478	0.2719	0.0097	0.2061	0.0570	0.0072	3	1.15	16%	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	0.1750	0.0100	0.2043	0.0337	0.0055	4	-0.87	7%	0
311.99	Sodium, Other (%)	0096	0.1900	0.0000	0.2043	0.0337	0.0055	4	-0.42	3%	0
311.99	Sodium, Other (%)	0035	0.1995	0.0070	0.2043	0.0337	0.0055	4	-0.14	1%	0
311.99	Sodium, Other (%)	0354	0.2525	0.0050	0.2043	0.0337	0.0055	4	1.43	12%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0428	0.0415*	0.0059	0.1584	0.0111	0.0064	13	-10.56	37%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0043	0.1485	0.0070	0.1584	0.0111	0.0064	13	-0.89	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0029	0.1494	0.0061	0.1584	0.0111	0.0064	13	-0.82	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0498	0.1500	0.0200	0.1584	0.0111	0.0064	13	-0.76	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0040	0.1560	0.0080	0.1584	0.0111	0.0064	13	-0.22	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0485	0.1570	0.0100	0.1584	0.0111	0.0064	13	-0.13	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0028	0.1575	0.0010	0.1584	0.0111	0.0064	13	-0.08	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0513	0.1580	0.0080	0.1584	0.0111	0.0064	13	-0.04	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0105	0.1587	0.0127	0.1584	0.0111	0.0064	13	0.02	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0457	0.1695	0.0030	0.1584	0.0111	0.0064	13	1.00	4%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0516	0.1695	0.0010	0.1584	0.0111	0.0064	13	1.00	4%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0481	0.1700	0.0000	0.1584	0.0111	0.0064	13	1.05	4%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.05%)	0169	0.1735	0.0010	0.1584	0.0111	0.0064	13	1.36	5%	0
321.02	Acid Soluble Zinc , AA, 965.09, test portion... (0.05%)	0025	0.1386	0.0029			0.0029	1			0
321.03	Acid Soluble Zinc , AA, 965.09, test portion... (0.05%)	0105	0.1611	0.0146			0.0146	1			0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0230	0.1145*	0.0010	0.1550	0.0097	0.0037	24	-4.17	13%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0027	0.1195*	0.0070	0.1550	0.0097	0.0037	24	-3.66	11%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0234	0.1350	0.0100	0.1550	0.0097	0.0037	24	-2.06	6%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0035	0.1389	0.0013	0.1550	0.0097	0.0037	24	-1.67	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0049	0.1450	0.0100	0.1550	0.0097	0.0037	24	-1.03	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0402	0.1480	0.0026	0.1550	0.0097	0.0037	24	-0.72	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0371	0.1500	0.0000	0.1550	0.0097	0.0037	24	-0.52	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0452	0.1500	0.0000	0.1550	0.0097	0.0037	24	-0.52	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0472	0.1500	0.0000	0.1550	0.0097	0.0037	24	-0.52	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0307	0.1512	0.0011	0.1550	0.0097	0.0037	24	-0.40	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0433	0.1549	0.0028	0.1550	0.0097	0.0037	24	-0.01	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0354	0.1550	0.0080	0.1550	0.0097	0.0037	24	0.00	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0324	0.1570	0.0040	0.1550	0.0097	0.0037	24	0.21	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0102	0.1590	0.0020	0.1550	0.0097	0.0037	24	0.41	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0041	0.1600	0.0000	0.1550	0.0097	0.0037	24	0.51	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0095	0.1600	0.0000	0.1550	0.0097	0.0037	24	0.51	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0292	0.1600	0.0000	0.1550	0.0097	0.0037	24	0.51	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0096	0.1613	0.0040	0.1550	0.0097	0.0037	24	0.65	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0231	0.1625	0.0070	0.1550	0.0097	0.0037	24	0.77	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0360	0.1625	0.0010	0.1550	0.0097	0.0037	24	0.77	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0474	0.1650	0.0100	0.1550	0.0097	0.0037	24	1.03	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0482	0.1650	0.0100	0.1550	0.0097	0.0037	24	1.03	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0233	0.1660	0.0021	0.1550	0.0097	0.0037	24	1.13	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0483	0.1805	0.0050	0.1550	0.0097	0.0037	24	2.63	8%	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				
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.05%)	0114	1,348	48.00	0.1550	0.0097	0.0037	24	138903.42	434759%	2
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0055	0.1308*	0.0032	0.1354	0.0065	0.0016	2	-0.71	2%	0
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0394	0.1400	0.0000	0.1354	0.0065	0.0016	2	0.71	2%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0486	0.1150*	0.0100	0.1500	0.0085	0.0044	8	-4.13	12%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0220	0.1440	0.0000	0.1500	0.0085	0.0044	8	-0.71	2%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0478	0.1448	0.0022	0.1500	0.0085	0.0044	8	-0.61	2%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0515	0.1498	0.0058	0.1500	0.0085	0.0044	8	-0.02	0%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0117	0.1515	0.0030	0.1500	0.0085	0.0044	8	0.18	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0034	0.1540	0.0020	0.1500	0.0085	0.0044	8	0.47	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0023	0.1560	0.0000	0.1500	0.0085	0.0044	8	0.71	2%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.05%)	0494	0.1616	0.0123	0.1500	0.0085	0.0044	8	1.37	4%	0
321.99	Acid Soluble Zinc , Other (0.05%)	0506	0.1450	0.0100	0.1539	0.0083	0.0085	4	-1.07	3%	0
321.99	Acid Soluble Zinc , Other (0.05%)	0389	0.1500	0.0080	0.1539	0.0083	0.0085	4	-0.47	1%	0
321.99	Acid Soluble Zinc , Other (0.05%)	0515	0.1563	0.0137	0.1539	0.0083	0.0085	4	0.29	1%	0
321.99	Acid Soluble Zinc , Other (0.05%)	0512	0.1642	0.0023	0.1539	0.0083	0.0085	4	1.25	3%	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 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.