

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 150511

Grade 32-0-4

Statistical Summary

Methods: 115

Labs Reporting: 90

Issue Date : 06/30/2015

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	5.736	0.5409	5.639		0.3665	0.0916	6.50%		0.0988	3.08%
001.99	Ammoniacal Nitrogen, Other (%)	12	12	5.877	1.054	5.964		0.9246	0.1887	15.50%		0.1009	3.06%
003.10	Water Insoluble Nitrogen, Method 1 (%)	3	3	0.6693	0.2195	0.6693		0.2194	0.0896	32.79%		0.2673	4.25%
003.99	Water Insoluble Nitrogen, Other (%)	1		11.45									
005.00	Urea Nitrogen, Urease (%)	2	2	15.21	0.5622								
005.99	Urea Nitrogen, Other (%)	4	4	16.22	2.114	16.22		2.114	0.7473	13.03%		0.2575	2.63%
007.00	Urea, Urease (%)	1		11.20									
007.99	Urea, Other (%)	1		15.88									
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	1		5.925									
010.11	Total Nitrogen, Modified Comprehensive (32%)	10	10	32.21	0.4641	32.25	0.8800	0.3675	0.0822	1.14%	1.36%	0.1400	2.37%
010.12	Total Nitrogen, Salicylic (32%)	4	4	32.25	0.4478	32.25	0.8800	0.4478	0.1583	1.39%	1.36%	0.2925	2.37%
010.60	Total Nitrogen, Combustion (32%)	61	58	32.48	0.9428	32.40	0.8800	0.3656	0.0339	1.13%	1.36%	0.1640	2.37%
010.99	Total Nitrogen, Other (32%)	5	5	31.89	0.3542	31.89	0.8800	0.3542	0.1120	1.11%	1.38%	0.2700	2.38%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ... (%)	1		0.0000									
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	1		0.2600									
020.40	Total Phosphorus as P2O5, Automated (%)	2	2	2.015	2.623								
020.50	Total Phosphorus as P2O5, ICP (%)	1		0.0000									
041.40	Direct Available Phosphorus as P2O5, Automated (%)	1		0.0000									
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (%)	2	0	0.0000									
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (%)	1		0.4510									
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		0.0500									
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	15	14	4.013	0.2261	3.983	0.4100	0.1938	0.0366	4.87%	5.15%	0.0811	3.25%
050.10	Soluble Potassium as K2O, STPB Citrate (4%)	3	3	4.416	0.6017	4.416	0.4100	0.6017	0.2456	13.62%	4.64%	0.0617	3.20%
050.30	Soluble Potassium as K2O, AA (4%)	7	7	3.865	0.1650	3.925	0.4100	0.0751	0.0201	1.91%	5.22%	0.1092	3.26%
050.31	Soluble Potassium as K2O, AA (4%)	1		3.885									
050.50	Soluble Potassium as K2O, ICP (4%)	7	7	4.046	0.4083	3.953	0.4100	0.2226	0.0595	5.63%	5.19%	0.1429	3.25%
050.51	Soluble Potassium as K2O, ICP (4%)	9	9	4.063	0.2738	3.998	0.4100	0.1487	0.0350	3.72%	5.13%	0.0856	3.25%
050.52	Soluble Potassium as K2O, ICP (4%)	7	7	4.044	0.1445	4.048	0.4100	0.1562	0.0418	3.86%	5.06%	0.1190	3.24%
050.60	Soluble Potassium as K2O, Flame Photometric (4%)	4	4	3.778	0.3395	3.778	0.4100	0.3395	0.1200	8.99%	5.43%	0.0300	3.27%
050.61	Soluble Potassium as K2O, Flame Photometric (4%)	5	5	4.059	0.1582	4.059	0.4100	0.1582	0.0500	3.90%	5.05%	0.1486	3.24%
050.62	Soluble Potassium as K2O, Flame Photometric (4%)	4	4	3.934	0.1149	3.934	0.4100	0.1149	0.0406	2.92%	5.21%	0.0675	3.25%

Method Code	Analyte & Method	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
050.99	Soluble Potassium as K2O, Other (4%)	25	25	3.897	0.2837	3.918	0.4100	0.1894	0.0268	4.83%	5.23%	0.0736	3.26%
060.00	Water (%)	4	4	1.330	0.1414	1.330		0.1414	0.0500	10.63%		0.0377	3.83%
060.99	Water (%)	1		4.420									
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	1		0.0360									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	6	6	0.0944	0.0696	0.0814		0.0479	0.0138	58.83%		0.0231	5.83%
101.31	Acid Soluble Calcium, ICP, test portion organic 965.09 (%)	1		0.0391									
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (%)	2	2	0.0391	0.0051								
101.99	Acid Soluble Calcium, Other (%)	1		0.0400									
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (%)	1		0.0274									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (%)	9	8	0.0364	0.0061	0.0364		0.0069	0.0017	19.03%		0.0107	6.58%
121.31	Acid Soluble Magnesium, ICP, test portion organic ... (%)	1		0.0336									
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (%)	2	2	0.0343	0.0024								
121.99	Acid Soluble Magnesium, Other (%)	2	2	0.0283	0.0025								
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon disu... (%)	2	2	7.698	0.3642								
143.99	Elemental Sulfur, Other (%)	4	4	7.704	0.3370	7.704		0.3370	0.1191	4.37%		0.2475	2.94%
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - ... (%)	3	3	7.815	0.0433	7.815		0.0433	0.0177	0.55%		0.0727	2.94%
145.99	Sulfate Sulfur, HCl soluble, Other (%)	2	2	7.240	0.1839								
148.00	Total Sulfur, Combustion (7%)	8	8	7.657	0.2836	7.673	0.5812	0.2852	0.0713	3.72%	3.79%	0.1389	2.94%
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	15	14	7.777	0.1465	7.788	0.5812	0.1234	0.0233	1.58%	3.73%	0.0746	2.94%
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	12	12	7.371	0.3838	7.373	0.5812	0.4302	0.0878	5.83%	3.94%	0.1753	2.96%
148.99	Total Sulfur, Other (7%)	11	11	7.567	0.3171	7.549	0.5812	0.2082	0.0444	2.76%	3.85%	0.1334	2.95%
149.04	Sulfur - HNO3 soluble, ICP (%)	1		6.924									
151.00	Acid Soluble Arsenic , AA, test portion as in 200... (ppm)	2	2	0.6200	0.4101								
151.30	Acid Soluble Arsenic , ICP (ppm)	4	4	1.671	1.603	1.671		1.603	0.5669	95.98%		0.1482	14.81%
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	2	1	0.2600									
151.99	Acid Soluble Arsenic , Other (ppm)	1		0.1600									
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (%)	1		0.0070									
165.99	Acid Soluble Boron , Other (%)	1		0.0000									
181.30	Acid Soluble Cadmium , ICP (ppm)	4	3	0.3943	0.3433	0.3943		0.3433	0.1402	87.08%		0.5688	18.40%
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9... (ppm)	1		0.4202									
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	1		0.0668									
181.99	Acid Soluble Cadmium , Other (ppm)	1		1.160									
191.00	Acid Soluble Chromium , AA, test portion as in 20... (ppm)	1		35.50									
191.30	Acid Soluble Chromium , ICP (ppm)	8	8	21.43	3.935	20.80		2.804	0.7011	13.48%		1.129	10.13%
191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9... (ppm)	2	2	23.73	0.4939								
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	2	2	14.49	3.693								
191.99	Acid Soluble Chromium , Other (ppm)	1		0.0000									
202.30	Acid Soluble Cobalt , ICP (ppm)	10	9	2.824	0.8493	2.848		0.9220	0.2173	32.38%		0.1059	13.67%
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3... (ppm)	2	2	3.886	0.5952								
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	2	2	1.579	0.1043								
202.99	Acid Soluble Cobalt , Other (ppm)	1		6.100									
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	2	2	0.0011	0.0007								

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
221.30	Acid Soluble Copper , ICP, test portion inorganic... (%)	12	11	1.996	4.502	0.0019		0.0014	0.0003	70.82%		0.0421	10.26%
221.31	Acid Soluble Copper , ICP, test portion organic 965.09 (%)	1		0.0009									
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-... (%)	3	2	0.0010	0.0001	0.0010		0.0001	0.0001	10.88%		0.0001	11.35%
221.99	Acid Soluble Copper , Other (%)	3	3	0.0012	0.0001	0.0012		0.0001	0.0001	11.02%		0.0001	11.01%
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	13	13	1.754	0.2563	1.826	0.1868	0.1404	0.0275	7.69%	5.12%	0.0612	3.65%
241.03	Acid Soluble Iron , AA, 965.09, test portion ... (2%)	1		1.970									
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	30	29	1.791	0.2225	1.823	0.1868	0.1396	0.0183	7.66%	5.12%	0.0423	3.65%
241.31	Acid Soluble Iron , ICP, test portion organic... (2%)	1		1.784									
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (2%)	6	6	1.735	0.3066	1.848	0.1868	0.0457	0.0132	2.47%	5.05%	0.0502	3.65%
241.99	Acid Soluble Iron , Other (2%)	6	6	1.206	0.9208	1.552	0.1868	0.4546	0.1312	29.30%	6.02%	0.0366	3.74%
251.30	Acid Soluble Lead , ICP (ppm)	7	7	1.392	0.9120	1.219		0.6701	0.1791	54.96%		0.1283	15.53%
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 H... (ppm)	1		0.3947									
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	2	2	4.683	6.177								
251.99	Acid Soluble Lead , Other (ppm)	2	1	2.840									
261.00	Acid Soluble Manganese , AA, Mn2+ only (%)	1		0.0103									
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	1		0.0100									
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (%)	8	7	0.0129	0.0077	0.0102		0.0008	0.0002	7.96%		0.0006	7.98%
261.31	Acid Soluble Manganese , ICP, test portion 972.02b (%)	2	2	0.0102	0.0003								
261.32	Acid Soluble Manganese , ICP, test portion inorga... (%)	2	2	0.0095	0.0007								
261.35	Acid Soluble Manganese , ICP, test portion 2006.0... (%)	2	2	0.0104	0.0005								
261.99	Acid Soluble Manganese , Other (%)	2	2	0.0091	0.0006								
281.00	Acid Soluble Mercury , AA (ppm)	1		0.0000									
281.30	Acid Soluble Mercury , ICP (ppm)	3	2	0.0636	0.0798	0.0636		0.0798	0.0399	125.52%		0.0204	24.22%
289.30	Acid Soluble Molybdenum , ICP (ppm)	10	10	2.325	0.3564	2.425		0.1066	0.0238	4.39%		0.2631	14.00%
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w... (ppm)	1		2.920									
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (ppm)	2	2	1.861	0.1209								
291.00	Acid Soluble Nickel , AA, test portion as in 2006... (ppm)	2	2	19.53	14.11								
291.30	Acid Soluble Nickel , ICP (ppm)	9	8	8.881	1.040	9.088		0.6825	0.1706	7.51%		0.3653	11.48%
291.32	Acid Soluble Nickel , ICP, 2006.03 (ppm)	1		9.875									
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3... (ppm)	2	2	10.56	0.4862								
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	2	2	6.391	1.911								
291.99	Acid Soluble Nickel , Other (ppm)	1		4.800									
301.30	Acid Soluble Selenium , ICP (ppm)	2	2	2.669	3.374								
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	2	1	0.5500									
311.30	Sodium, Flame Photometric (%)	1		0.2950									
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test ... (%)	1		0.0139									
311.99	Sodium, Other (%)	5	5	0.0263	0.0199	0.0263		0.0199	0.0063	75.70%		0.0070	6.92%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	2	2	0.0007	0.0003								
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (%)	12	11	2.443	4.508	0.0038		0.0037	0.0008	95.58%		0.0329	9.24%
321.31	Acid Soluble Zinc , ICP, test portion organic 965.09 (%)	1		0.0003									
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C,... (%)	2	1	0.0004									
321.99	Acid Soluble Zinc , Other (%)	3	3	0.0007	0.0007	0.0007		0.0007	0.0003	102.38%		0.0005	12.02%

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STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 150511

Method Precision Report

Grade 32-0-4

Issue Date : 06/30/2015

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	5.573	0.3066	0.2998	0.0910	0.3133	5.38%	1.63%	5.62%	3.442
001.99	Ammoniacal Nitrogen, Other	12	11	6.102	0.7428	0.7393	0.1032	0.7464	12.11%	1.69%	12.23%	7.236
010.11	Total Nitrogen, Modified Comprehensive	10	10	32.21	0.4641	0.4546	0.1315	0.4733	1.41%	0.41%	1.47%	3.598
010.60	Total Nitrogen, Combustion	61	54	32.35	0.3903	0.3796	0.1289	0.4008	1.17%	0.40%	1.24%	3.109
050.00	Soluble Potassium as K2O, STPB Oxalate	15	13	3.974	0.1797	0.1753	0.0561	0.1840	4.41%	1.41%	4.63%	3.280
050.30	Soluble Potassium as K2O, AA	7	6	3.910	0.1251	0.1161	0.0660	0.1335	2.97%	1.69%	3.42%	2.022
050.50	Soluble Potassium as K2O, ICP	7	6	3.901	0.1539	0.1419	0.0843	0.1650	3.64%	2.16%	4.23%	1.958
050.51	Soluble Potassium as K2O, ICP	9	8	3.982	0.1354	0.1218	0.0839	0.1478	3.06%	2.11%	3.71%	1.763
050.52	Soluble Potassium as K2O, ICP	7	7	4.044	0.1445	0.1229	0.1076	0.1633	3.04%	2.66%	4.04%	1.518
050.99	Soluble Potassium as K2O, Other	25	24	3.927	0.2463	0.2407	0.0740	0.2518	6.13%	1.89%	6.41%	3.401
101.30	Acid Soluble Calcium, ICP, test portion inorganic 965.09	6	5	0.0683	0.0307	0.0264	0.0221	0.0345	38.70%	32.36%	50.45%	1.559
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09	9	8	0.0364	0.0061		0.0099			27.08%		
148.00	Total Sulfur, Combustion	8	8	7.657	0.2836	0.2635	0.1483	0.3024	3.44%	1.94%	3.95%	2.039
148.01	Total Sulfur, Gravimetric - sulfate and elemental	15	13	7.757	0.1305	0.1260	0.0485	0.1350	1.62%	0.62%	1.74%	2.785
148.07	Total Sulfur, ICP, test portion as in 2006.03 modified w/9:3 HNO3:	12	12	7.371	0.3838	0.3706	0.1411	0.3966	5.03%	1.91%	5.38%	2.811
148.99	Total Sulfur, Other	11	10	7.495	0.2225	0.2030	0.1289	0.2405	2.71%	1.72%	3.21%	1.866
191.30	Acid Soluble Chromium , ICP	8	7	20.20	1.940	1.733	1.235	2.128	8.58%	6.12%	10.54%	1.723
202.30	Acid Soluble Cobalt , ICP	10	9	2.824	0.8493	0.8457	0.1104	0.8528	29.95%	3.91%	30.20%	7.723
221.30	Acid Soluble Copper , ICP, test portion inorganic 965.09	12	10	0.9250	2.918	2.918	0.0134	2.918	315.46%	1.45%	315.46%	217.4
241.00	Acid Soluble Iron , AA, inorganic 965.09	13	12	1.805	0.1860	0.1833	0.0448	0.1887	10.15%	2.48%	10.45%	4.209
241.30	Acid Soluble Iron , ICP, test portion inorganic 965.09	30	28	1.820	0.1640	0.1616	0.0403	0.1665	8.88%	2.21%	9.15%	4.132
241.33	Acid Soluble Iron , ICP, test portion 2006.03A-C, w/dual acid	6	5	1.859	0.0326	0.0117	0.0430	0.0446	0.63%	2.31%	2.40%	1.036
241.99	Acid Soluble Iron , Other	6	6	1.206	0.9208	0.9204	0.0406	0.9213	76.33%	3.37%	76.40%	22.68
251.30	Acid Soluble Lead , ICP	7	7	1.392	0.9120	0.9082	0.1182	0.9158	65.24%	8.49%	65.79%	7.749
261.30	Acid Soluble Manganese , ICP, test portion 972.02a	8	6	0.0100	0.0006	0.0005	0.0005	0.0007	5.32%	4.87%	7.21%	1.481
289.30	Acid Soluble Molybdenum , ICP	10	9	2.417	0.2198	0.1744	0.1890	0.2572	7.22%	7.82%	10.64%	1.361
291.30	Acid Soluble Nickel , ICP	9	8	8.881	1.040	1.008	0.3634	1.071	11.35%	4.09%	12.06%	2.948
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09	12	9	1.321	2.824	2.824	0.0233	2.824	213.81%	1.77%	213.82%	121.0

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Methods: 115

Sample # 150511

Lab Values

Labs Reporting: 90

Grade 32-0-4

Issue Date : 06/30/2015

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 (%)	0498	5.050	0.1000	5.639	0.3665	0.0988	8	-1.61	5%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0444	5.455	0.2500	5.639	0.3665	0.0988	8	-0.50	2%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0230	5.495	0.1300	5.639	0.3665	0.0988	8	-0.39	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0500	5.515	0.1500	5.639	0.3665	0.0988	8	-0.34	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0456	5.625	0.0500	5.639	0.3665	0.0988	8	-0.04	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0481	5.900	0.0400	5.639	0.3665	0.0988	8	0.71	2%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0389	5.970	0.0000	5.639	0.3665	0.0988	8	0.90	3%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0405	6.875	0.0700	5.639	0.3665	0.0988	8	3.37	11%	0
001.99	Ammoniacal Nitrogen, Other (%)	0487	3.400	0.0000	5.964	0.9246	0.1009	12	-2.77	21%	0
001.99	Ammoniacal Nitrogen, Other (%)	0368	5.125	0.1700	5.964	0.9246	0.1009	12	-0.91	7%	0
001.99	Ammoniacal Nitrogen, Other (%)	0027	5.316	0.2110	5.964	0.9246	0.1009	12	-0.70	5%	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	5.500	0.2000	5.964	0.9246	0.1009	12	-0.50	4%	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	5.620	0.0000	5.964	0.9246	0.1009	12	-0.37	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0513	5.725	0.0300	5.964	0.9246	0.1009	12	-0.26	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0397	5.905	0.0100	5.964	0.9246	0.1009	12	-0.06	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	6.125	0.2900	5.964	0.9246	0.1009	12	0.17	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0510	6.545	0.0100	5.964	0.9246	0.1009	12	0.63	5%	0
001.99	Ammoniacal Nitrogen, Other (%)	0489	6.965	0.0300	5.964	0.9246	0.1009	12	1.08	8%	0
001.99	Ammoniacal Nitrogen, Other (%)	0220	7.025	0.1100	5.964	0.9246	0.1009	12	1.15	9%	0
001.99	Ammoniacal Nitrogen, Other (%)	0415	7.275	0.1500	5.964	0.9246	0.1009	12	1.42	11%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0220	0.4350	0.0100	0.6693	0.2194	0.2673	3	-1.07	18%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0494	0.7030	0.3540	0.6693	0.2194	0.2673	3	0.15	3%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0029	0.8700	0.4380	0.6693	0.2194	0.2673	3	0.91	15%	0
003.99	Water Insoluble Nitrogen, Other (%)	0498	11.45	0.7000			0.7000	1			0
005.00	Urea Nitrogen, Urease (as N) (%)	0389	14.82	0.1700	15.21	0.5621	0.1250	2	-0.71	1%	0
005.00	Urea Nitrogen, Urease (as N) (%)	0368	15.61	0.0800	15.21	0.5621	0.1250	2	0.71	1%	0
005.99	Urea Nitrogen, Other (%)	0029	14.89	0.6700	16.22	2.114	0.2575	4	-0.63	4%	0
005.99	Urea Nitrogen, Other (%)	0027	15.11	0.0400	16.22	2.114	0.2575	4	-0.52	3%	0
005.99	Urea Nitrogen, Other (%)	0394	15.52	0.0700	16.22	2.114	0.2575	4	-0.33	2%	0
005.99	Urea Nitrogen, Other (%)	0481	19.37	0.2500	16.22	2.114	0.2575	4	1.49	10%	0
007.00	Urea, Urease (as Urea) (%)	0230	11.20	0.0000			0.0000	1			0
007.99	Urea, Other (%)	0220	15.88	0.0300			0.0300	1			0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0444	5.925	0.3300			0.3300	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				
010.11	Total Nitrogen, Modified Comprehensive (32%)	0500	31.40*	0.4000	32.25	0.3675	0.1400	10	-2.30	1%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0114	31.61	0.0200	32.25	0.3675	0.1400	10	-1.73	1%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0510	32.03	0.1800	32.25	0.3675	0.1400	10	-0.59	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0371	32.08	0.3100	32.25	0.3675	0.1400	10	-0.46	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0456	32.23	0.0500	32.25	0.3675	0.1400	10	-0.06	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0211	32.35	0.1000	32.25	0.3675	0.1400	10	0.28	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0416	32.40	0.0300	32.25	0.3675	0.1400	10	0.41	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0105	32.50	0.1700	32.25	0.3675	0.1400	10	0.68	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0090	32.52	0.1200	32.25	0.3675	0.1400	10	0.75	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0513	33.01	0.0200	32.25	0.3675	0.1400	10	2.08	1%	0
010.12	Total Nitrogen, Salicylic (32%)	0481	31.69	0.4000	32.25	0.4478	0.2925	4	-1.26	1%	0
010.12	Total Nitrogen, Salicylic (32%)	0397	32.10	0.2000	32.25	0.4478	0.2925	4	-0.34	0%	0
010.12	Total Nitrogen, Salicylic (32%)	0185	32.58	0.2700	32.25	0.4478	0.2925	4	0.72	0%	0
010.12	Total Nitrogen, Salicylic (32%)	0498	32.65	0.3000	32.25	0.4478	0.2925	4	0.88	1%	0
010.60	Total Nitrogen, Combustion (32%)	0443	31.15*	0.1000	32.40	0.3656	0.1640	58	-3.42	2%	0
010.60	Total Nitrogen, Combustion (32%)	0444	31.40*	0.4400	32.40	0.3656	0.1640	58	-2.74	2%	0
010.60	Total Nitrogen, Combustion (32%)	0421	31.52	0.0200	32.40	0.3656	0.1640	58	-2.41	1%	0
010.60	Total Nitrogen, Combustion (32%)	0102	31.73	0.1400	32.40	0.3656	0.1640	58	-1.84	1%	0
010.60	Total Nitrogen, Combustion (32%)	0486	31.78	0.1900	32.40	0.3656	0.1640	58	-1.71	1%	0
010.60	Total Nitrogen, Combustion (32%)	0389	31.88	0.1900	32.40	0.3656	0.1640	58	-1.44	1%	0
010.60	Total Nitrogen, Combustion (32%)	0451	31.95	0.1000	32.40	0.3656	0.1640	58	-1.23	1%	0
010.60	Total Nitrogen, Combustion (32%)	0377	32.03	0.0500	32.40	0.3656	0.1640	58	-1.03	1%	0
010.60	Total Nitrogen, Combustion (32%)	0368	32.03	0.0490	32.40	0.3656	0.1640	58	-1.01	1%	0
010.60	Total Nitrogen, Combustion (32%)	0494	32.06	0.3300	32.40	0.3656	0.1640	58	-0.95	1%	0
010.60	Total Nitrogen, Combustion (32%)	0508	32.08	0.1680	32.40	0.3656	0.1640	58	-0.88	0%	0
010.60	Total Nitrogen, Combustion (32%)	0023	32.13	0.1610	32.40	0.3656	0.1640	58	-0.75	0%	0
010.60	Total Nitrogen, Combustion (32%)	0043	32.17	0.0000	32.40	0.3656	0.1640	58	-0.63	0%	0
010.60	Total Nitrogen, Combustion (32%)	0070	32.18	0.8200	32.40	0.3656	0.1640	58	-0.61	0%	0
010.60	Total Nitrogen, Combustion (32%)	0482	32.20	0.4000	32.40	0.3656	0.1640	58	-0.55	0%	0
010.60	Total Nitrogen, Combustion (32%)	0096	32.21	0.0500	32.40	0.3656	0.1640	58	-0.54	0%	0
010.60	Total Nitrogen, Combustion (32%)	0291	32.21	0.0100	32.40	0.3656	0.1640	58	-0.54	0%	0
010.60	Total Nitrogen, Combustion (32%)	0231	32.21	0.0400	32.40	0.3656	0.1640	58	-0.52	0%	0
010.60	Total Nitrogen, Combustion (32%)	0406	32.21	0.3800	32.40	0.3656	0.1640	58	-0.52	0%	0
010.60	Total Nitrogen, Combustion (32%)	0234	32.22	0.1500	32.40	0.3656	0.1640	58	-0.51	0%	0
010.60	Total Nitrogen, Combustion (32%)	0402	32.22	0.0200	32.40	0.3656	0.1640	58	-0.50	0%	0
010.60	Total Nitrogen, Combustion (32%)	0483	32.22	0.1000	32.40	0.3656	0.1640	58	-0.50	0%	0
010.60	Total Nitrogen, Combustion (32%)	0018	32.25	0.1000	32.40	0.3656	0.1640	58	-0.41	0%	0
010.60	Total Nitrogen, Combustion (32%)	0405	32.33	0.0400	32.40	0.3656	0.1640	58	-0.19	0%	0
010.60	Total Nitrogen, Combustion (32%)	0037	32.34	0.0370	32.40	0.3656	0.1640	58	-0.18	0%	0
010.60	Total Nitrogen, Combustion (32%)	0040	32.35	0.3000	32.40	0.3656	0.1640	58	-0.14	0%	0
010.60	Total Nitrogen, Combustion (32%)	0489	32.37	0.0300	32.40	0.3656	0.1640	58	-0.10	0%	0
010.60	Total Nitrogen, Combustion (32%)	0292	32.39	0.0100	32.40	0.3656	0.1640	58	-0.04	0%	0
010.60	Total Nitrogen, Combustion (32%)	0157	32.40	0.2000	32.40	0.3656	0.1640	58	0.00	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total Nitrogen, Combustion (32%)	0230	32.40	0.0000	32.40	0.3656	0.1640	58	0.00	0%	0
010.60	Total Nitrogen, Combustion (32%)	0516	32.40	0.0000	32.40	0.3656	0.1640	58	0.00	0%	0
010.60	Total Nitrogen, Combustion (32%)	0356	32.42	0.1300	32.40	0.3656	0.1640	58	0.04	0%	0
010.60	Total Nitrogen, Combustion (32%)	0360	32.44	0.0100	32.40	0.3656	0.1640	58	0.09	0%	0
010.60	Total Nitrogen, Combustion (32%)	0136	32.45	0.0600	32.40	0.3656	0.1640	58	0.13	0%	0
010.60	Total Nitrogen, Combustion (32%)	0095	32.47	0.1900	32.40	0.3656	0.1640	58	0.17	0%	0
010.60	Total Nitrogen, Combustion (32%)	0233	32.49	0.1200	32.40	0.3656	0.1640	58	0.24	0%	0
010.60	Total Nitrogen, Combustion (32%)	0394	32.50	0.0000	32.40	0.3656	0.1640	58	0.27	0%	0
010.60	Total Nitrogen, Combustion (32%)	0324	32.55	0.1000	32.40	0.3656	0.1640	58	0.41	0%	0
010.60	Total Nitrogen, Combustion (32%)	0024	32.60	0.2000	32.40	0.3656	0.1640	58	0.54	0%	0
010.60	Total Nitrogen, Combustion (32%)	0452	32.61	0.0100	32.40	0.3656	0.1640	58	0.56	0%	0
010.60	Total Nitrogen, Combustion (32%)	0072	32.61	0.1200	32.40	0.3656	0.1640	58	0.57	0%	0
010.60	Total Nitrogen, Combustion (32%)	0275	32.66	0.0200	32.40	0.3656	0.1640	58	0.71	0%	0
010.60	Total Nitrogen, Combustion (32%)	0055	32.67	0.4400	32.40	0.3656	0.1640	58	0.74	0%	0
010.60	Total Nitrogen, Combustion (32%)	0307	32.69	0.0450	32.40	0.3656	0.1640	58	0.80	0%	0
010.60	Total Nitrogen, Combustion (32%)	0007	32.70	0.2000	32.40	0.3656	0.1640	58	0.82	0%	0
010.60	Total Nitrogen, Combustion (32%)	0177	32.70	0.0600	32.40	0.3656	0.1640	58	0.82	0%	0
010.60	Total Nitrogen, Combustion (32%)	0049	32.74	0.0800	32.40	0.3656	0.1640	58	0.93	1%	0
010.60	Total Nitrogen, Combustion (32%)	0035	32.75	0.0400	32.40	0.3656	0.1640	58	0.95	1%	0
010.60	Total Nitrogen, Combustion (32%)	0390	32.75	0.5000	32.40	0.3656	0.1640	58	0.95	1%	0
010.60	Total Nitrogen, Combustion (32%)	0025	32.76	0.7500	32.40	0.3656	0.1640	58	0.97	1%	0
010.60	Total Nitrogen, Combustion (32%)	0105	32.77	0.2420	32.40	0.3656	0.1640	58	1.00	1%	0
010.60	Total Nitrogen, Combustion (32%)	0029	32.79	0.2600	32.40	0.3656	0.1640	58	1.06	1%	0
010.60	Total Nitrogen, Combustion (32%)	0354	32.86	0.0350	32.40	0.3656	0.1640	58	1.27	1%	0
010.60	Total Nitrogen, Combustion (32%)	0162	32.90	0.1800	32.40	0.3656	0.1640	58	1.36	1%	0
010.60	Total Nitrogen, Combustion (32%)	0042	32.91	0.1700	32.40	0.3656	0.1640	58	1.38	1%	0
010.60	Total Nitrogen, Combustion (32%)	0131	33.10	0.6600	32.40	0.3656	0.1640	58	1.91	1%	0
010.60	Total Nitrogen, Combustion (32%)	0351	33.21	0.1170	32.40	0.3656	0.1640	58	2.20	1%	0
010.60	Total Nitrogen, Combustion (32%)	0073	38.90	0.1500	32.40	0.3656	0.1640	58	17.76	10%	0
010.60	Total Nitrogen, Combustion (32%)	0472	31.95	1.330	32.40	0.3656	0.1640	58	-1.25	1%	1
010.60	Total Nitrogen, Combustion (32%)	0457	33.50	1.800	32.40	0.3656	0.1640	58	3.01	2%	1
010.60	Total Nitrogen, Combustion (32%)	0041	11.73*	0.0300	32.40	0.3656	0.1640	58	-56.56	32%	2
010.99	Total Nitrogen, Other (32%)	0506	31.50	0.6000	31.89	0.3542	0.2700	5	-1.09	1%	0
010.99	Total Nitrogen, Other (32%)	0415	31.63	0.1800	31.89	0.3542	0.2700	5	-0.72	0%	0
010.99	Total Nitrogen, Other (32%)	0493	31.85	0.1000	31.89	0.3542	0.2700	5	-0.10	0%	0
010.99	Total Nitrogen, Other (32%)	0487	32.05	0.3000	31.89	0.3542	0.2700	5	0.47	0%	0
010.99	Total Nitrogen, Other (32%)	0220	32.40	0.1700	31.89	0.3542	0.2700	5	1.44	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0322	0.0000	0.0000			0.0000	0			4
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	0.2600	0.0000			0.0000	1			0
020.40	Total Phosphorus as P2O5, Automated (%)	0096	0.1600	0.0200	2.015	2.623	0.1000	2	-0.71	46%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0042	3.870	0.1800	2.015	2.623	0.1000	2	0.71	46%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	0.0000	0.0000			0.0000	0			4
041.40	Direct Available Phosphorus as P2O5, Automated (%)	0018	0.0000	0.0000			0.0000	0			4

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041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (%)	0421	0.0000	0.0000	2.015	2.623	0.0000	0	-0.77	50%	4
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (%)	0377	0.0050	0.0100	2.015	2.623	0.0000	0	-0.77	50%	4
041.60	Direct Available Phosphorus as P2O5, Citrate-... (%)	0354	0.4510	0.1360			0.1360	1			0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	0.0500	0.0200			0.0200	1			0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0114	3.730	0.0000	3.983	0.1938	0.0811	14	-1.30	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0494	3.770	0.1200	3.983	0.1938	0.0811	14	-1.10	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0072	3.812	0.1160	3.983	0.1938	0.0811	14	-0.88	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0489	3.865	0.0900	3.983	0.1938	0.0811	14	-0.61	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0258	3.900	0.1200	3.983	0.1938	0.0811	14	-0.43	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0090	3.920	0.0800	3.983	0.1938	0.0811	14	-0.32	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0220	3.950	0.0400	3.983	0.1938	0.0811	14	-0.17	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0416	3.960	0.0600	3.983	0.1938	0.0811	14	-0.12	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0211	3.980	0.0200	3.983	0.1938	0.0811	14	-0.01	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0231	4.015	0.1100	3.983	0.1938	0.0811	14	0.17	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0049	4.225	0.0700	3.983	0.1938	0.0811	14	1.25	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0055	4.235	0.0500	3.983	0.1938	0.0811	14	1.30	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0102	4.300	0.0000	3.983	0.1938	0.0811	14	1.64	4%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0405	4.520	0.2600	3.983	0.1938	0.0811	14	2.77	7%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0230	4.175	0.5700	3.983	0.1938	0.0811	14	0.99	2%	1
050.10	Soluble Potassium as K2O, STPB Citrate (4%)	0322	4.039	0.0850	4.416	0.6017	0.0617	3	-0.63	4%	0
050.10	Soluble Potassium as K2O, STPB Citrate (4%)	0498	4.100	0.0000	4.416	0.6017	0.0617	3	-0.53	4%	0
050.10	Soluble Potassium as K2O, STPB Citrate (4%)	0117	5.110	0.1000	4.416	0.6017	0.0617	3	1.15	8%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0516	3.595	0.3500	3.925	0.0751	0.1092	7	-4.39	4%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0428	3.665	0.1845	3.925	0.0751	0.1092	7	-3.47	3%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0040	3.900	0.0000	3.925	0.0751	0.1092	7	-0.33	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0157	3.940	0.0200	3.925	0.0751	0.1092	7	0.20	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0185	3.975	0.1100	3.925	0.0751	0.1092	7	0.67	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0356	3.985	0.0700	3.925	0.0751	0.1092	7	0.80	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0136	3.995	0.0300	3.925	0.0751	0.1092	7	0.93	1%	0
050.31	Soluble Potassium as K2O, AA (Citrate) (4%)	0472	3.885	0.0300			0.0300	1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0157	3.725	0.0500	3.953	0.2226	0.1429	7	-1.02	3%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0292	3.790	0.0200	3.953	0.2226	0.1429	7	-0.73	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0390	3.800	0.0600	3.953	0.2226	0.1429	7	-0.69	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0055	3.930	0.0400	3.953	0.2226	0.1429	7	-0.10	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0324	4.080	0.2400	3.953	0.2226	0.1429	7	0.57	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0444	4.080	0.1400	3.953	0.2226	0.1429	7	0.57	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0406	4.915	0.4500	3.953	0.2226	0.1429	7	4.32	12%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0070	3.795	0.0100	3.998	0.1487	0.0856	9	-1.37	3%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0043	3.875	0.0500	3.998	0.1487	0.0856	9	-0.83	2%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0452	3.905	0.0300	3.998	0.1487	0.0856	9	-0.63	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0007	3.950	0.1000	3.998	0.1487	0.0856	9	-0.32	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0486	3.990	0.1600	3.998	0.1487	0.0856	9	-0.06	0%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0291	4.030	0.0200	3.998	0.1487	0.0856	9	0.21	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0483	4.075	0.1700	3.998	0.1487	0.0856	9	0.52	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0025	4.235	0.2100	3.998	0.1487	0.0856	9	1.59	3%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0072	4.710	0.0200	3.998	0.1487	0.0856	9	4.79	9%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0485	3.790	0.1000	4.048	0.1562	0.1190	7	-1.65	3%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0233	3.992	0.0570	4.048	0.1562	0.1190	7	-0.36	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0354	3.999	0.1960	4.048	0.1562	0.1190	7	-0.31	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0360	4.000	0.0200	4.048	0.1562	0.1190	7	-0.31	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0377	4.150	0.3000	4.048	0.1562	0.1190	7	0.65	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0023	4.180	0.1400	4.048	0.1562	0.1190	7	0.85	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0421	4.200	0.0200	4.048	0.1562	0.1190	7	0.97	2%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (4%)	0443	3.305*	0.0100	3.778	0.3395	0.0300	4	-1.39	6%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (4%)	0510	3.780	0.0000	3.778	0.3395	0.0300	4	0.01	0%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (4%)	0105	3.935	0.0300	3.778	0.3395	0.0300	4	0.46	2%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (4%)	0169	4.090	0.0800	3.778	0.3395	0.0300	4	0.92	4%	0
050.61	Soluble Potassium as K2O, Flame Photometric (... (4%)	0024	3.870	0.0200	4.059	0.1582	0.1486	5	-1.19	2%	0
050.61	Soluble Potassium as K2O, Flame Photometric (... (4%)	0456	3.985	0.0700	4.059	0.1582	0.1486	5	-0.47	1%	0
050.61	Soluble Potassium as K2O, Flame Photometric (... (4%)	0513	4.030	0.0200	4.059	0.1582	0.1486	5	-0.18	0%	0
050.61	Soluble Potassium as K2O, Flame Photometric (... (4%)	0494	4.115	0.0700	4.059	0.1582	0.1486	5	0.36	1%	0
050.61	Soluble Potassium as K2O, Flame Photometric (... (4%)	0037	4.294	0.5630	4.059	0.1582	0.1486	5	1.48	3%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (4%)	0029	3.865	0.0100	3.934	0.1149	0.0675	4	-0.60	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (4%)	0105	3.870	0.0600	3.934	0.1149	0.0675	4	-0.55	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (4%)	0018	3.895	0.0100	3.934	0.1149	0.0675	4	-0.34	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (4%)	0095	4.105	0.1900	3.934	0.1149	0.0675	4	1.49	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0501	3.180*	0.1600	3.918	0.1894	0.0736	25	-3.90	9%	0
050.99	Soluble Potassium as K2O, Other (4%)	0307	3.400*	0.2600	3.918	0.1894	0.0736	25	-2.73	7%	0
050.99	Soluble Potassium as K2O, Other (4%)	0402	3.447*	0.0060	3.918	0.1894	0.0736	25	-2.49	6%	0
050.99	Soluble Potassium as K2O, Other (4%)	0389	3.715	0.0300	3.918	0.1894	0.0736	25	-1.07	3%	0
050.99	Soluble Potassium as K2O, Other (4%)	0482	3.725	0.0100	3.918	0.1894	0.0736	25	-1.02	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0234	3.745	0.0300	3.918	0.1894	0.0736	25	-0.91	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0481	3.780	0.0200	3.918	0.1894	0.0736	25	-0.73	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0451	3.785	0.0300	3.918	0.1894	0.0736	25	-0.70	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0457	3.815	0.0100	3.918	0.1894	0.0736	25	-0.54	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0275	3.890	0.0000	3.918	0.1894	0.0736	25	-0.15	0%	0
050.99	Soluble Potassium as K2O, Other (4%)	0043	3.900	0.0400	3.918	0.1894	0.0736	25	-0.09	0%	0
050.99	Soluble Potassium as K2O, Other (4%)	0394	3.900	0.0000	3.918	0.1894	0.0736	25	-0.09	0%	0
050.99	Soluble Potassium as K2O, Other (4%)	0231	3.955	0.0500	3.918	0.1894	0.0736	25	0.20	0%	0
050.99	Soluble Potassium as K2O, Other (4%)	0105	3.975	0.0300	3.918	0.1894	0.0736	25	0.30	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0371	3.975	0.0100	3.918	0.1894	0.0736	25	0.30	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0500	3.975	0.0500	3.918	0.1894	0.0736	25	0.30	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0096	3.980	0.1600	3.918	0.1894	0.0736	25	0.33	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0487	4.000	0.0000	3.918	0.1894	0.0736	25	0.43	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0506	4.025	0.1500	3.918	0.1894	0.0736	25	0.57	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0177	4.033	0.1483	3.918	0.1894	0.0736	25	0.61	1%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
050.99	Soluble Potassium as K2O, Other (4%)	0368	4.063	0.2568	3.918	0.1894	0.0736	25	0.76	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0508	4.081	0.1260	3.918	0.1894	0.0736	25	0.86	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0493	4.200	0.1000	3.918	0.1894	0.0736	25	1.49	4%	0
050.99	Soluble Potassium as K2O, Other (4%)	0027	4.347	0.0140	3.918	0.1894	0.0736	25	2.27	5%	0
050.99	Soluble Potassium as K2O, Other (4%)	0444	4.545	0.1500	3.918	0.1894	0.0736	25	3.31	8%	0
060.00	Water (Free), Vacuum Oven (%)	0007	1.180	0.1000	1.330	0.1414	0.0377	4	-1.06	6%	0
060.00	Water (Free), Vacuum Oven (%)	0456	1.260	0.0200	1.330	0.1414	0.0377	4	-0.49	3%	0
060.00	Water (Free), Vacuum Oven (%)	0416	1.374	0.0007	1.330	0.1414	0.0377	4	0.31	2%	0
060.00	Water (Free), Vacuum Oven (%)	0096	1.505	0.0300	1.330	0.1414	0.0377	4	1.24	7%	0
060.99	Water (Free), Other (%)	0510	4.420	0.0600			0.0600	1			0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0105	0.0360	0.0016			0.0016	1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	0.0400	0.0000	0.0814	0.0479	0.0231	6	-0.86	25%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0351	0.0412	0.0057	0.0814	0.0479	0.0231	6	-0.84	25%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0049	0.0585	0.0190	0.0814	0.0479	0.0231	6	-0.48	14%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	0.1000	0.0200	0.0814	0.0479	0.0231	6	0.39	11%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	0.1020	0.0640	0.0814	0.0479	0.0231	6	0.43	13%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0041	0.2250	0.0300	0.0814	0.0479	0.0231	6	3.00	88%	0
101.31	Acid Soluble Calcium, ICP, test portion organ... (%)	0494	0.0391	0.0028			0.0028	1			0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0421	0.0355	0.0150	0.0391	0.0051	0.0090	2	-0.71	5%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0494	0.0427	0.0029	0.0391	0.0051	0.0090	2	0.71	5%	0
101.99	Acid Soluble Calcium, Other (%)	0389	0.0400	0.0000			0.0000	1			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (%)	0105	0.0274	0.0008			0.0008	1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0049	0.0275	0.0030	0.0364	0.0069	0.0107	8	-1.29	12%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0096	0.0300	0.0000	0.0364	0.0069	0.0107	8	-0.93	9%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0351	0.0314	0.0065	0.0364	0.0069	0.0107	8	-0.73	7%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0055	0.0375	0.0150	0.0364	0.0069	0.0107	8	0.16	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0390	0.0386	0.0039	0.0364	0.0069	0.0107	8	0.31	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0482	0.0400	0.0200	0.0364	0.0069	0.0107	8	0.52	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0035	0.0420	0.0280	0.0364	0.0069	0.0107	8	0.80	8%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0354	0.0445	0.0090	0.0364	0.0069	0.0107	8	1.17	11%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0041	0.5150	0.0100	0.0364	0.0069	0.0107	8	69.06	657%	2
121.31	Acid Soluble Magnesium, ICP, test portion org... (%)	0494	0.0336	0.0016			0.0016	1			0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0494	0.0327	0.0003	0.0343	0.0024	0.0002	2	-0.71	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0421	0.0360	0.0000	0.0343	0.0024	0.0002	2	0.71	2%	0
121.99	Acid Soluble Magnesium, Other (%)	0389	0.0265	0.0010	0.0283	0.0025	0.0015	2	-0.71	3%	0
121.99	Acid Soluble Magnesium, Other (%)	0501	0.0300	0.0020	0.0283	0.0025	0.0015	2	0.71	3%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0025	7.440	0.0400	7.698	0.3642	0.0850	2	-0.71	2%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0055	7.955	0.1300	7.698	0.3642	0.0850	2	0.71	2%	0
143.99	Elemental Sulfur, Other (%)	0472	7.250	0.4600	7.704	0.3370	0.2475	4	-1.35	3%	0
143.99	Elemental Sulfur, Other (%)	0389	7.745	0.1300	7.704	0.3370	0.2475	4	0.12	0%	0
143.99	Elemental Sulfur, Other (%)	0390	7.755	0.3700	7.704	0.3370	0.2475	4	0.15	0%	0
143.99	Elemental Sulfur, Other (%)	0291	8.065	0.0300	7.704	0.3370	0.2475	4	1.07	2%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0233	7.790	0.0080	7.815	0.0433	0.0727	3	-0.58	0%	0

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145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0027	7.790	0.1400	7.815	0.0433	0.0727	3	-0.58	0%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0397	7.865	0.0700	7.815	0.0433	0.0727	3	1.15	0%	0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0444	7.110	0.1000	7.240	0.1838	0.1100	2	-0.71	1%	0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0169	7.370	0.1200	7.240	0.1838	0.1100	2	0.71	1%	0
148.00	Total Sulfur, Combustion (7%)	0351	7.120	0.0324	7.673	0.2852	0.1389	8	-1.94	4%	0
148.00	Total Sulfur, Combustion (7%)	0136	7.455	0.0700	7.673	0.2852	0.1389	8	-0.76	1%	0
148.00	Total Sulfur, Combustion (7%)	0451	7.565	0.3500	7.673	0.2852	0.1389	8	-0.38	1%	0
148.00	Total Sulfur, Combustion (7%)	0157	7.610	0.0600	7.673	0.2852	0.1389	8	-0.22	0%	0
148.00	Total Sulfur, Combustion (7%)	0029	7.731	0.0290	7.673	0.2852	0.1389	8	0.20	0%	0
148.00	Total Sulfur, Combustion (7%)	0360	7.900	0.4600	7.673	0.2852	0.1389	8	0.80	1%	0
148.00	Total Sulfur, Combustion (7%)	0049	7.910	0.0800	7.673	0.2852	0.1389	8	0.83	2%	0
148.00	Total Sulfur, Combustion (7%)	0131	7.965	0.0300	7.673	0.2852	0.1389	8	1.03	2%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0481	7.465	0.0700	7.788	0.1234	0.0746	14	-2.62	2%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0405	7.613	0.0470	7.788	0.1234	0.0746	14	-1.42	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0040	7.650	0.1000	7.788	0.1234	0.0746	14	-1.12	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0513	7.665	0.0300	7.788	0.1234	0.0746	14	-1.00	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0105	7.685	0.0900	7.788	0.1234	0.0746	14	-0.84	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0102	7.784	0.0570	7.788	0.1234	0.0746	14	-0.04	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0324	7.810	0.0200	7.788	0.1234	0.0746	14	0.18	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0457	7.825	0.0900	7.788	0.1234	0.0746	14	0.30	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0095	7.835	0.0100	7.788	0.1234	0.0746	14	0.38	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0029	7.845	0.0100	7.788	0.1234	0.0746	14	0.46	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0043	7.875	0.0500	7.788	0.1234	0.0746	14	0.70	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0114	7.875	0.1300	7.788	0.1234	0.0746	14	0.70	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0485	7.910	0.0600	7.788	0.1234	0.0746	14	0.99	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0230	8.040	0.2800	7.788	0.1234	0.0746	14	2.04	2%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (7%)	0157	7.960	0.3800	7.788	0.1234	0.0746	14	1.39	1%	1
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0515	6.700*	0.1690	7.373	0.4302	0.1753	12	-1.57	5%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0444	6.885*	0.1100	7.373	0.4302	0.1753	12	-1.13	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0023	7.093	0.3120	7.373	0.4302	0.1753	12	-0.65	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0494	7.164	0.1175	7.373	0.4302	0.1753	12	-0.49	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0483	7.285	0.2700	7.373	0.4302	0.1753	12	-0.20	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0394	7.310	0.3600	7.373	0.4302	0.1753	12	-0.15	0%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0406	7.350	0.2000	7.373	0.4302	0.1753	12	-0.05	0%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0486	7.430	0.1800	7.373	0.4302	0.1753	12	0.13	0%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0037	7.705	0.1030	7.373	0.4302	0.1753	12	0.77	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0102	7.730	0.1610	7.373	0.4302	0.1753	12	0.83	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0177	7.889	0.0013	7.373	0.4302	0.1753	12	1.20	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (7%)	0421	7.910	0.1200	7.373	0.4302	0.1753	12	1.25	4%	0
148.99	Total Sulfur, Other (7%)	0508	7.009*	0.3650	7.549	0.2082	0.1334	11	-2.59	4%	0
148.99	Total Sulfur, Other (7%)	0482	7.305	0.0500	7.549	0.2082	0.1334	11	-1.17	2%	0
148.99	Total Sulfur, Other (7%)	0501	7.400	0.0800	7.549	0.2082	0.1334	11	-0.71	1%	0
148.99	Total Sulfur, Other (7%)	0452	7.480	0.0000	7.549	0.2082	0.1334	11	-0.33	0%	0

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148.99	Total Sulfur, Other (7%)	0371	7.515	0.1300	7.549	0.2082	0.1334	11	-0.16	0%	0
148.99	Total Sulfur, Other (7%)	0275	7.545	0.0500	7.549	0.2082	0.1334	11	-0.02	0%	0
148.99	Total Sulfur, Other (7%)	0513	7.590	0.0600	7.549	0.2082	0.1334	11	0.20	0%	0
148.99	Total Sulfur, Other (7%)	0354	7.621	0.1130	7.549	0.2082	0.1334	11	0.35	0%	0
148.99	Total Sulfur, Other (7%)	0096	7.670	0.3800	7.549	0.2082	0.1334	11	0.58	1%	0
148.99	Total Sulfur, Other (7%)	0307	7.820	0.0990	7.549	0.2082	0.1334	11	1.30	2%	0
148.99	Total Sulfur, Other (7%)	0506	8.280	0.1400	7.549	0.2082	0.1334	11	3.51	5%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0368	6.924	0.8362			0.8362	1			0
151.00	Acid Soluble Arsenic , AA, test portion as i... (ppm)	0136	0.3300	0.0200	0.6200	0.4101	0.0220	2	-0.71	23%	0
151.00	Acid Soluble Arsenic , AA, test portion as i... (ppm)	0025	0.9100	0.0240	0.6200	0.4101	0.0220	2	0.71	23%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0230	0.2480	0.0300	1.671	1.603	0.1482	4	-0.89	43%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0394	0.3241	0.0028	1.671	1.603	0.1482	4	-0.84	40%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0368	2.910	0.1600	1.671	1.603	0.1482	4	0.77	37%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0389	3.200	0.4000	1.671	1.603	0.1482	4	0.95	46%	0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0501	0.2600	0.0000	1.671	1.603	0.0000	1	-0.88	42%	0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000	1.671	1.603	0.0000	1	-1.04	50%	4
151.99	Acid Soluble Arsenic , Other (ppm)	0415	0.1600	0.0000			0.0000	1			0
165.30	Acid Soluble Boron , ICP, test portion in 98... (%)	0354	0.0070	0.0020			0.0020	1			0
165.99	Acid Soluble Boron , Other (%)	0421	0.0000	0.0000			0.0000	0			4
181.30	Acid Soluble Cadmium , ICP (ppm)	0035	0.1810	0.1920	0.3943	0.3433	0.5688	3	-0.62	27%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0230	0.2115	0.0150	0.3943	0.3433	0.5688	3	-0.53	23%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0368	0.7904	1.499	0.3943	0.3433	0.5688	3	1.15	50%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0394	0.0000	0.0000	0.3943	0.3433	0.5688	3	-1.15	50%	4
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0494	0.4202	0.0263			0.0263	1			0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	0.0668	0.0023			0.0023	1			0
181.99	Acid Soluble Cadmium , Other (ppm)	0415	1.160	0.0000			0.0000	1			0
191.00	Acid Soluble Chromium , AA, test portion as ... (ppm)	0481	35.50	5.000			5.000	1			0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	17.85	2.700	20.80	2.804	1.129	8	-1.05	7%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0368	18.15	0.5000	20.80	2.804	1.129	8	-0.94	6%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	19.40	0.0000	20.80	2.804	1.129	8	-0.50	3%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0102	20.32	3.315	20.80	2.804	1.129	8	-0.17	1%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	20.35	0.3000	20.80	2.804	1.129	8	-0.16	1%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	22.35	1.500	20.80	2.804	1.129	8	0.55	4%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0230	22.95	0.7000	20.80	2.804	1.129	8	0.77	5%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0452	30.10	0.0200	20.80	2.804	1.129	8	3.32	22%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0494	23.38	1.419	23.73	0.4939	0.7695	2	-0.71	1%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0037	24.08	0.1200	23.73	0.4939	0.7695	2	0.71	1%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0501	11.88	0.7300	14.49	3.693	0.5120	2	-0.71	9%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0515	17.10	0.2940	14.49	3.693	0.5120	2	0.71	9%	0
191.99	Acid Soluble Chromium , Other (ppm)	0512	0.0000	0.0000			0.0000	0			4
202.30	Acid Soluble Cobalt , ICP (ppm)	0368	1.620	0.0400	2.848	0.9220	0.1059	9	-1.33	22%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0102	1.719	0.3420	2.848	0.9220	0.1059	9	-1.22	20%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0230	2.325	0.1100	2.848	0.9220	0.1059	9	-0.57	9%	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)	0389	2.450	0.1000	2.848	0.9220	0.1059	9	-0.43	7%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0095	3.000	0.0000	2.848	0.9220	0.1059	9	0.17	3%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0452	3.340	0.0200	2.848	0.9220	0.1059	9	0.53	9%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	3.400	0.0000	2.848	0.9220	0.1059	9	0.60	10%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	3.425	0.0700	2.848	0.9220	0.1059	9	0.63	10%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0494	4.136	0.2712	2.848	0.9220	0.1059	9	1.40	23%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0035	1.770	0.7600	2.848	0.9220	0.1059	9	-1.17	19%	1
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0494	3.465	0.0550	3.886	0.5952	0.0900	2	-0.71	5%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0037	4.307	0.1250	3.886	0.5952	0.0900	2	0.71	5%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0501	1.505	0.0100	1.579	0.1043	0.0305	2	-0.71	2%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	1.653	0.0510	1.579	0.1043	0.0305	2	0.71	2%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0512	6.100	6.600			6.600	1			0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0105	0.0006	0.0008	0.0011	0.0007	0.0005	2	-0.71	23%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0043	0.0017	0.0001	0.0011	0.0007	0.0005	2	0.71	23%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0041	0.0001	0.0000	0.0019	0.0014	0.0421	11	-1.34	47%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0102	0.0010	0.0000	0.0019	0.0014	0.0421	11	-0.68	24%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0230	0.0011	0.0000	0.0019	0.0014	0.0421	11	-0.60	21%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0049	0.0012	0.0001	0.0019	0.0014	0.0421	11	-0.57	20%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0433	0.0012	0.0001	0.0019	0.0014	0.0421	11	-0.57	20%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0035	0.0012	0.0004	0.0019	0.0014	0.0421	11	-0.53	19%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0394	0.0022	0.0001	0.0019	0.0014	0.0421	11	0.17	6%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0354	0.0050	0.0020	0.0019	0.0014	0.0421	11	2.27	80%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0402	0.0074	0.0004	0.0019	0.0014	0.0421	11	4.03	143%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0452	9.230	0.0600	0.0019	0.0014	0.0421	11	6792.43	240507%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0368	12.70	0.4000	0.0019	0.0014	0.0421	11	9346.56	330944%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0096	11.09	0.7200	0.0019	0.0014	0.0421	11	8161.50	288983%	1
221.31	Acid Soluble Copper , ICP, test portion orga... (%)	0494	0.0009	0.0001			0.0001	1			0
221.33	Acid Soluble Copper , ICP, test portion 2006... (%)	0515	0.0009	0.0000	0.0010	0.0001	0.0001	2	-0.71	4%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (%)	0494	0.0011	0.0001	0.0010	0.0001	0.0001	2	0.71	4%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (%)	0421	0.0000	0.0000	0.0010	0.0001	0.0001	2	-9.19	50%	4
221.99	Acid Soluble Copper , Other (%)	0389	0.0011	0.0000	0.0012	0.0001	0.0001	3	-0.76	4%	0
221.99	Acid Soluble Copper , Other (%)	0512	0.0012	0.0001	0.0012	0.0001	0.0001	3	-0.38	2%	0
221.99	Acid Soluble Copper , Other (%)	0506	0.0014	0.0001	0.0012	0.0001	0.0001	3	1.13	6%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0516	1.140*	0.1600	1.826	0.1404	0.0612	13	-4.88	19%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0513	1.410*	0.0200	1.826	0.1404	0.0612	13	-2.96	11%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0481	1.490*	0.0600	1.826	0.1404	0.0612	13	-2.39	9%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0485	1.705	0.0500	1.826	0.1404	0.0612	13	-0.86	3%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0043	1.775	0.0700	1.826	0.1404	0.0612	13	-0.36	1%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0258	1.790	0.0800	1.826	0.1404	0.0612	13	-0.25	1%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0498	1.870	0.0000	1.826	0.1404	0.0612	13	0.32	1%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0105	1.895	0.1270	1.826	0.1404	0.0612	13	0.49	2%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0040	1.895	0.0300	1.826	0.1404	0.0612	13	0.49	2%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0025	1.934	0.0200	1.826	0.1404	0.0612	13	0.77	3%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0169	1.945	0.0300	1.826	0.1404	0.0612	13	0.85	3%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0457	1.968	0.0980	1.826	0.1404	0.0612	13	1.01	4%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (2%)	0029	1.981	0.0500	1.826	0.1404	0.0612	13	1.11	4%	0
241.03	Acid Soluble Iron , AA, 965.09, test portion ... (2%)	0136	1.970	0.0000			0.0000	1			0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0041	0.9935*	0.0598	1.823	0.1396	0.0423	29	-5.94	23%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0472	1.420*	0.0200	1.823	0.1396	0.0423	29	-2.88	11%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0482	1.420*	0.1000	1.823	0.1396	0.0423	29	-2.88	11%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0114	1.605*	0.0300	1.823	0.1396	0.0423	29	-1.56	6%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0131	1.645	0.0300	1.823	0.1396	0.0423	29	-1.27	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0291	1.700	0.1000	1.823	0.1396	0.0423	29	-0.88	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0452	1.735	0.0100	1.823	0.1396	0.0423	29	-0.63	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0368	1.747	0.0735	1.823	0.1396	0.0423	29	-0.54	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0230	1.750	0.0000	1.823	0.1396	0.0423	29	-0.52	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0433	1.772	0.0110	1.823	0.1396	0.0423	29	-0.37	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0351	1.791	0.0158	1.823	0.1396	0.0423	29	-0.23	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0102	1.799	0.0620	1.823	0.1396	0.0423	29	-0.17	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0095	1.800	0.0000	1.823	0.1396	0.0423	29	-0.16	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0233	1.809	0.1240	1.823	0.1396	0.0423	29	-0.10	0%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0049	1.830	0.0000	1.823	0.1396	0.0423	29	0.05	0%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0402	1.840	0.0100	1.823	0.1396	0.0423	29	0.12	0%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0157	1.865	0.0300	1.823	0.1396	0.0423	29	0.30	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0390	1.865	0.0900	1.823	0.1396	0.0423	29	0.30	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0231	1.865	0.0100	1.823	0.1396	0.0423	29	0.30	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0096	1.880	0.0200	1.823	0.1396	0.0423	29	0.41	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0371	1.880	0.0200	1.823	0.1396	0.0423	29	0.41	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0234	1.920	0.0200	1.823	0.1396	0.0423	29	0.70	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0354	1.922	0.0260	1.823	0.1396	0.0423	29	0.71	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0360	1.940	0.0200	1.823	0.1396	0.0423	29	0.84	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0394	1.940	0.1120	1.823	0.1396	0.0423	29	0.84	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0055	1.953	0.0950	1.823	0.1396	0.0423	29	0.93	4%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0483	2.065	0.0100	1.823	0.1396	0.0423	29	1.74	7%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0324	2.085	0.0300	1.823	0.1396	0.0423	29	1.88	7%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0027	2.108	0.0980	1.823	0.1396	0.0423	29	2.04	8%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (2%)	0035	1.560*	0.2600	1.823	0.1396	0.0423	29	-1.88	7%	1
241.31	Acid Soluble Iron , ICP, test portion organic... (2%)	0494	1.784	0.0351			0.0351	1			0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (2%)	0515	1.112*	0.0482	1.848	0.0457	0.0502	6	-16.11	20%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (2%)	0177	1.809	0.0307	1.848	0.0457	0.0502	6	-0.85	1%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (2%)	0421	1.850	0.1000	1.848	0.0457	0.0502	6	0.04	0%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (2%)	0494	1.864	0.0770	1.848	0.0457	0.0502	6	0.36	0%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (2%)	0486	1.880	0.0400	1.848	0.0457	0.0502	6	0.70	1%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (2%)	0037	1.894	0.0050	1.848	0.0457	0.0502	6	1.00	1%	0
241.99	Acid Soluble Iron , Other (2%)	0508	0.0205*	0.0010	1.552	0.4546	0.0366	6	-3.37	49%	0
241.99	Acid Soluble Iron , Other (2%)	0512	0.0436*	0.0007	1.552	0.4546	0.0366	6	-3.32	49%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
241.99	Acid Soluble Iron , Other (2%)	0389	1.535*	0.0100	1.552	0.4546	0.0366	6	-0.04	1%	0
241.99	Acid Soluble Iron , Other (2%)	0501	1.785	0.0100	1.552	0.4546	0.0366	6	0.51	8%	0
241.99	Acid Soluble Iron , Other (2%)	0506	1.880	0.1000	1.552	0.4546	0.0366	6	0.72	11%	0
241.99	Acid Soluble Iron , Other (2%)	0023	1.971	0.0980	1.552	0.4546	0.0366	6	0.92	14%	0
251.30	Acid Soluble Lead , ICP (ppm)	0230	0.5850	0.0080	1.219	0.6701	0.1283	7	-0.95	26%	0
251.30	Acid Soluble Lead , ICP (ppm)	0394	0.6500	0.0000	1.219	0.6701	0.1283	7	-0.85	23%	0
251.30	Acid Soluble Lead , ICP (ppm)	0368	0.8590	0.1300	1.219	0.6701	0.1283	7	-0.54	15%	0
251.30	Acid Soluble Lead , ICP (ppm)	0452	1.065	0.0500	1.219	0.6701	0.1283	7	-0.23	6%	0
251.30	Acid Soluble Lead , ICP (ppm)	0096	1.400	0.2000	1.219	0.6701	0.1283	7	0.27	7%	0
251.30	Acid Soluble Lead , ICP (ppm)	0035	2.085	0.3100	1.219	0.6701	0.1283	7	1.29	35%	0
251.30	Acid Soluble Lead , ICP (ppm)	0389	3.100	0.2000	1.219	0.6701	0.1283	7	2.81	77%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0494	0.3947	0.0858			0.0858	1			0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0501	0.3150	0.1100	4.683	6.177	0.2145	2	-0.71	47%	0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	9.051	0.3190	4.683	6.177	0.2145	2	0.71	47%	0
251.99	Acid Soluble Lead , Other (ppm)	0415	2.840	0.3200	4.683	6.177	0.3200	1	-0.30	20%	0
251.99	Acid Soluble Lead , Other (ppm)	0512	26.05	52.10	4.683	6.177	0.3200	1	3.46	228%	4
261.00	Acid Soluble Manganese , AA, Mn2+ only (%)	0043	0.0103	0.0006			0.0006	1			0
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	0105	0.0100	0.0002			0.0002	1			0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0035	0.0094	0.0009	0.0102	0.0008	0.0006	7	-1.01	4%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0102	0.0095	0.0010	0.0102	0.0008	0.0006	7	-0.82	3%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0351	0.0097	0.0002	0.0102	0.0008	0.0006	7	-0.58	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0472	0.0100	0.0000	0.0102	0.0008	0.0006	7	-0.21	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0354	0.0105	0.0010	0.0102	0.0008	0.0006	7	0.41	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0390	0.0110	0.0000	0.0102	0.0008	0.0006	7	1.03	4%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0041	0.0304	0.0008	0.0102	0.0008	0.0006	7	25.00	100%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (%)	0096	106.2	1.100	0.0102	0.0008	0.0006	7	131135.38	522032%	2
261.31	Acid Soluble Manganese , ICP, test portion 9... (%)	0482	0.0100	0.0000	0.0102	0.0003	0.0003	2	-0.71	1%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (%)	0494	0.0104	0.0006	0.0102	0.0003	0.0003	2	0.71	1%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (%)	0049	0.0090	0.0004	0.0095	0.0007	0.0002	2	-0.71	3%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (%)	0055	0.0100	0.0000	0.0095	0.0007	0.0002	2	0.71	3%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (%)	0421	0.0100	0.0000	0.0104	0.0005	0.0003	2	-0.71	2%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (%)	0494	0.0108	0.0005	0.0104	0.0005	0.0003	2	0.71	2%	0
261.99	Acid Soluble Manganese , Other (%)	0389	0.0087	0.0003	0.0091	0.0006	0.0004	2	-0.71	2%	0
261.99	Acid Soluble Manganese , Other (%)	0501	0.0095	0.0004	0.0091	0.0006	0.0004	2	0.71	2%	0
281.00	Acid Soluble Mercury , AA (ppm)	0230	0.0000	0.0000			0.0000	0			4
281.30	Acid Soluble Mercury , ICP (ppm)	0394	0.0072	0.0007	0.0636	0.0798	0.0204	2	-0.71	44%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0501	0.1200	0.0400	0.0636	0.0798	0.0204	2	0.71	44%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0252	0.0504	0.0636	0.0798	0.0204	2	-0.48	30%	4
289.30	Acid Soluble Molybdenum , ICP (ppm)	0095	1.500	1.000	2.425	0.1066	0.2631	10	-8.68	19%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0394	2.000	0.0000	2.425	0.1066	0.2631	10	-3.99	9%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0102	2.210	0.3740	2.425	0.1066	0.2631	10	-2.01	4%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0494	2.384	0.1107	2.425	0.1066	0.2631	10	-0.39	1%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0368	2.440	0.3400	2.425	0.1066	0.2631	10	0.14	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				
289.30	Acid Soluble Molybdenum , ICP (ppm)	0035	2.450	0.0400	2.425	0.1066	0.2631	10	0.24	1%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0433	2.458	0.1060	2.425	0.1066	0.2631	10	0.31	1%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0096	2.500	0.6000	2.425	0.1066	0.2631	10	0.71	2%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0452	2.505	0.0500	2.425	0.1066	0.2631	10	0.75	2%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0230	2.805	0.0100	2.425	0.1066	0.2631	10	3.57	8%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (ppm)	0494	2.920	0.0270			0.0270	1			0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (ppm)	0501	1.775	0.1900	1.861	0.1209	0.1210	2	-0.71	2%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (ppm)	0515	1.946	0.0520	1.861	0.1209	0.1210	2	0.71	2%	0
291.00	Acid Soluble Nickel , AA, test portion as in... (ppm)	0136	9.550	0.1000	19.53	14.11	0.5500	2	-0.71	26%	0
291.00	Acid Soluble Nickel , AA, test portion as in... (ppm)	0481	29.50	1.000	19.53	14.11	0.5500	2	0.71	26%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0368	6.965	0.3700	9.088	0.6825	0.3653	8	-3.11	12%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	7.800	0.2000	9.088	0.6825	0.3653	8	-1.89	7%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0394	8.800	0.6000	9.088	0.6825	0.3653	8	-0.42	2%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0095	9.000	0.0000	9.088	0.6825	0.3653	8	-0.13	0%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0102	9.337	1.042	9.088	0.6825	0.3653	8	0.36	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0096	9.350	0.7000	9.088	0.6825	0.3653	8	0.38	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0230	9.570	0.0000	9.088	0.6825	0.3653	8	0.71	3%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0452	10.23	0.0100	9.088	0.6825	0.3653	8	1.67	6%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	8.800	2.600	9.088	0.6825	0.3653	8	-0.42	2%	1
291.32	Acid Soluble Nickel , ICP, 2006.03 (ppm)	0233	9.875	0.0430			0.0430	1			0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0494	10.22	0.6413	10.56	0.4862	0.5157	2	-0.71	2%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0037	10.91	0.3900	10.56	0.4862	0.5157	2	0.71	2%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0501	5.040	0.9400	6.391	1.911	0.6470	2	-0.71	11%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	7.742	0.3540	6.391	1.911	0.6470	2	0.71	11%	0
291.99	Acid Soluble Nickel , Other (ppm)	0512	4.800	1.800			1.800	1			0
301.30	Acid Soluble Selenium , ICP (ppm)	0230	0.2830	0.1480	2.669	3.374	0.3490	2	-0.71	45%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0368	5.055	0.5500	2.669	3.374	0.3490	2	0.71	45%	0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0501	0.5500	0.0800	2.669	3.374	0.0800	1	-0.63	40%	0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0515	0.0000	0.0000	2.669	3.374	0.0800	1	-0.79	50%	4
311.30	Sodium, Flame Photometric (%)	0510	0.2950	0.0100			0.0100	1			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0494	0.0139	0.0002			0.0002	1			0
311.99	Sodium, Other (%)	0482	0.0100	0.0000	0.0263	0.0199	0.0070	5	-0.82	31%	0
311.99	Sodium, Other (%)	0096	0.0150	0.0100	0.0263	0.0199	0.0070	5	-0.57	21%	0
311.99	Sodium, Other (%)	0494	0.0155	0.0008	0.0263	0.0199	0.0070	5	-0.54	21%	0
311.99	Sodium, Other (%)	0035	0.0325	0.0090	0.0263	0.0199	0.0070	5	0.31	12%	0
311.99	Sodium, Other (%)	0354	0.0585	0.0150	0.0263	0.0199	0.0070	5	1.62	61%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0428	0.0005	0.0000	0.0007	0.0003	0.0001	2	-0.71	14%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0043	0.0009	0.0002	0.0007	0.0003	0.0001	2	0.71	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0394	0.0004	0.0000	0.0038	0.0037	0.0329	11	-0.94	45%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0230	0.0005	0.0001	0.0038	0.0037	0.0329	11	-0.92	44%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0102	0.0005	0.0000	0.0038	0.0037	0.0329	11	-0.91	43%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0035	0.0009	0.0005	0.0038	0.0037	0.0329	11	-0.82	39%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0433	0.0018	0.0003	0.0038	0.0037	0.0329	11	-0.57	27%	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... (%)	0354	0.0025	0.0010	0.0038	0.0037	0.0329	11	-0.37	17%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0402	0.0121	0.0025	0.0038	0.0037	0.0329	11	2.23	107%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0041	1.288	0.2175	0.0038	0.0037	0.0329	11	349.30	16692%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0452	3.805	0.0700	0.0038	0.0037	0.0329	11	1034.06	49416%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0292	8.065	0.0700	0.0038	0.0037	0.0329	11	2192.95	104796%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0096	13.70	0.0000	0.0038	0.0037	0.0329	11	3725.90	178052%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (%)	0368	8.580	9.640	0.0038	0.0037	0.0329	11	2333.05	111491%	1
321.31	Acid Soluble Zinc , ICP, test portion organi... (%)	0494	0.0003	0.0000			0.0000	1			0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (%)	0515	0.0004	0.0002	0.0038	0.0037	0.0002	1	-0.94	45%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (%)	0421	0.0000	0.0000	0.0038	0.0037	0.0002	1	-1.05	50%	4
321.99	Acid Soluble Zinc , Other (%)	0501	0.0002	0.0000	0.0007	0.0007	0.0005	3	-0.68	35%	0
321.99	Acid Soluble Zinc , Other (%)	0389	0.0004	0.0001	0.0007	0.0007	0.0005	3	-0.46	24%	0
321.99	Acid Soluble Zinc , Other (%)	0512	0.0015	0.0013	0.0007	0.0007	0.0005	3	1.15	59%	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 reporting, in this case the Z Scores are included for information only (Grey). An offset lab value with an astrix indicates that the value is lower than the Analyte value less the IA. Method or Analyte codes in light green indicate a guaranteed analyte. Individual lab values may be below detection limits but are reported solely for the purpose of this Proficiency Testing program.