

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 171211

Grade 5-15-30

Statistical Summary

Methods: 149

Labs Reporting: 91

Issue Date : 01/31/2018

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 (%)	12	12	4.270	0.1068	4.270		0.1211	0.0437	2.84%		0.0404	3.21%
001.99	Ammoniacal Nitrogen, Other (%)	21	21	4.395	0.1598	4.383		0.1391	0.0379	3.17%		0.0444	3.20%
002.20	Nitrate Nitrogen, Jones Modified (%)	1		4.445									
002.99	Nitrate Nitrogen, Other (%)	17	17	0.7412	0.0969	0.7302		0.0826	0.0250	11.32%		0.0410	4.19%
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	4	4	5.118	0.0814	5.118		0.0814	0.0509	1.59%		0.0725	3.13%
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	2	2	5.295	0.0636								
010.11	Total Nitrogen, Modified Comprehensive (5%)	6	6	4.953	0.2272	4.968	0.5114	0.2215	0.1130	4.46%	5.15%	0.0536	3.14%
010.12	Total Nitrogen, Salicylic (5%)	2	2	5.173	0.0180								
010.16	Total Nitrogen, Raney (5%)	1		4.760									
010.60	Total Nitrogen, Combustion (5%)	54	52	5.161	0.1713	5.160	0.5114	0.1335	0.0231	2.59%	4.96%	0.0700	3.12%
010.99	Total Nitrogen, Other (5%)	6	6	5.120	0.2614	5.120	0.5114	0.2964	0.1512	5.79%	4.99%	0.0430	3.13%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ... (%)	4	4	15.69	0.1322	15.69		0.1322	0.0826	0.84%		0.1450	2.64%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	17	16	15.72	0.6043	15.76		0.4983	0.1557	3.16%		0.1087	2.64%
020.40	Total Phosphorus as P2O5, Automated (%)	2	2	15.36	0.1237								
020.50	Total Phosphorus as P2O5, ICP (%)	19	17	15.60	0.6775	15.58		0.7381	0.2238	4.74%		0.2275	2.65%
020.99	Total Phosphorus as P2O5, Other (%)	6	5	15.92	2.340	15.92		2.340	1.308	14.70%		0.0720	2.64%
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t... (%)	1		0.1700									
040.20	Indirect Available Phosphorus as P2O5, Spectrophot... (15%)	2	2	15.78	0.3076								
040.40	Indirect Available Phosphorus as P2O5, Automated (15%)	1		15.11									
040.99	Indirect Available Phosphorus as P2O5, Other (15%)	1		15.32									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q... (15%)	4	4	15.14	0.4647	15.14	0.7000	0.4647	0.2904	3.07%	2.31%	0.3624	2.66%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q... (15%)	2	2	15.20	0.2121								
041.20	Direct Available Phosphorus as P2O5, Spectrophotom... (15%)	1		14.63									
041.21	Direct Available Phosphorus as P2O5, Spectrophotom... (15%)	5	5	15.08	0.4960	15.08	0.7000	0.4960	0.2773	3.29%	2.32%	0.1900	2.66%
041.40	Direct Available Phosphorus as P2O5, Automated (15%)	1		15.82									
041.50	Direct Available Phosphorus as P2O5, ICP (15%)	2	2	15.13	0.2475								
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (15%)	9	9	15.12	0.2059	15.12	0.7000	0.2250	0.0937	1.49%	2.31%	0.2163	2.66%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ... (15%)	13	13	15.09	0.3216	15.09	0.7000	0.3647	0.1264	2.42%	2.32%	0.1117	2.66%
041.99	Direct Available Phosphorus as P2O5, Other (15%)	11	11	15.11	0.2449	15.11	0.7000	0.1439	0.0542	0.95%	2.32%	0.1173	2.66%
048.10	Water Soluble Phosphorus as P2O5, Gravimetric Quin... (%)	1		12.91									
048.20	Water Soluble Phosphorus as P2O5, Spectrophotometr... (%)	2	2	12.81	0.3829								

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048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		12.93									
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	1		13.17									
048.99	Water Soluble Phosphorus as P2O5, Other (%)	2	2	12.87	0.0389								
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	9	9	30.44	0.3551	30.44	1.4022	0.4027	0.1678	1.32%	2.30%	0.1660	2.39%
050.30	Soluble Potassium as K2O, AA (Oxalate) (30%)	6	5	31.29	0.9145	31.29	1.4022	0.9145	0.5112	2.92%	2.24%	0.4920	2.38%
050.31	Soluble Potassium as K2O, AA (Citrate) (30%)	1		23.25									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	8	8	30.34	0.7594	30.26	1.4022	0.6669	0.2947	2.20%	2.32%	0.7126	2.39%
050.51	Soluble Potassium as K2O, ICP (Citrate) (30%)	3	3	25.77	8.520	25.77	1.4022	8.520	6.149	33.06%	2.72%	0.4067	2.45%
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	10	10	30.84	0.7952	30.84	1.4022	0.8899	0.3518	2.89%	2.27%	0.3836	2.39%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala... (30%)	5	5	28.39	7.530	28.39	1.4022	7.530	4.209	26.52%	2.47%	0.0341	2.42%
050.61	Soluble Potassium as K2O, Flame Photometric (Citra... (30%)	2	2	30.94	0.0566								
050.62	Soluble Potassium as K2O, Flame Photometric (Citra... (30%)	2	2	30.54	0.3168								
050.99	Soluble Potassium as K2O, Other (30%)	36	35	30.24	1.291	30.41	1.4022	0.6747	0.1426	2.22%	2.31%	0.3845	2.39%
060.00	Water (Free), Vacuum Oven (%)	2	2	0.6775	0.1096								
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours,...	1		1.150									
060.99	Water (Free), Other (%)	5	5	1.214	0.5529	1.214		0.5529	0.3091	45.54%		0.0612	3.88%
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (1%)	4	4	0.3687	0.0239	0.3687	0.2192	0.0239	0.0150	6.49%	29.73%	0.0168	4.65%
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (1%	16	15	0.3922	0.1049	0.3700	0.2192	0.0582	0.0188	15.74%	29.63%	0.0131	4.65%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (	5	5	0.3875	0.0486	0.3875	0.2192	0.0486	0.0272	12.55%	28.29%	0.0212	4.61%
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (	10	10	0.3459	0.0453	0.3531	0.2192	0.0238	0.0094	6.75%	31.05%	0.0139	4.68%
101.70	Acid Soluble Calcium, Titrimetric (1%)	4	4	0.9382	0.2996	0.9382	0.2192	0.2996	0.1872	31.93%	11.68%	0.0800	4.04%
101.99	Acid Soluble Calcium, Other (1%)	6	6	0.5306	0.2836	0.4800	0.2192	0.1950	0.0995	40.62%	22.84%	0.0242	4.47%
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (1.2%)	8	8	1.260	0.2599	1.208	0.2592	0.1543	0.0682	12.77%	10.73%	0.0502	3.89%
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (	18	18	1.189	0.1019	1.186	0.2592	0.1084	0.0319	9.14%	10.93%	0.0280	3.90%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A... (	6	6	1.196	0.1685	1.155	0.2592	0.0837	0.0427	7.25%	11.22%	0.0183	3.91%
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (	12	11	1.167	0.0583	1.169	0.2592	0.0635	0.0239	5.43%	11.09%	0.0257	3.91%
121.70	Acid Soluble Magnesium, Titrimetric (EDTA) (1.2%)	1		1.650									
121.99	Acid Soluble Magnesium, Other (1.2%)	9	9	1.182	0.1401	1.198	0.2592	0.0777	0.0324	6.48%	10.82%	0.0291	3.89%
131.00	Water Soluble Magnesium, AA (%)	2	2	1.061	0.0906								
131.30	Water Soluble Magnesium, ICP (%)	1		0.9850									
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	3	3	1.008	0.3840	1.008		0.3840	0.2771	38.11%		0.0791	4.00%
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon disu... (%)	2	2	1.352	0.4634								
143.99	Elemental Sulfur, Other (%)	3	3	5.622	0.5777	5.622		0.5777	0.4169	10.28%		0.1133	3.08%
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - ... (%)	6	6	4.189	0.1779	4.189		0.2017	0.1029	4.82%		0.0862	3.22%
145.99	Sulfate Sulfur, HCl soluble, Other (%)	2	2	4.518	1.107								
148.00	Total Sulfur, Combustion (5%)	5	5	5.940	0.2083	5.940	0.4734	0.2083	0.1164	3.51%	3.98%	0.1818	3.06%
148.01	Total Sulfur, Gravimetric - sulfate and elemental... (5%	10	9	5.168	0.9430	5.168	0.4734	1.069	0.4456	20.69%	4.58%	0.1293	3.12%
148.07	Total Sulfur, ICP, test portion as in 2006.03 modi... (5%	11	11	5.275	1.018	5.275	0.4734	1.154	0.4350	21.88%	4.49%	0.0692	3.11%
148.99	Total Sulfur, Other (5%)	12	12	5.574	0.6341	5.616	0.4734	0.6252	0.2256	11.13%	4.21%	0.2017	3.08%
149.04	Sulfur - HNO3 soluble, ICP (%)	2	2	5.981	0.0333								
151.30	Acid Soluble Arsenic , ICP (ppm)	7	7	154.2	36.09	157.3		33.63	15.89	21.39%		3.651	7.47%
151.32	Acid Soluble Arsenic , ICP, 2006.03 (ppm)	1		206.8									

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151.33	Acid Soluble Arsenic , ICP, 2006.03 modified w/9:3...	5	5	206.2	16.51	206.2		16.51	9.229	8.01%		5.192	7.17%
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	2	2	189.3	8.734								
151.99	Acid Soluble Arsenic , Other (ppm)	2	2	134.0	34.72								
165.00	Acid Soluble Boron , Spectrophotometric (0.3%)	11	10	0.2283	0.0365	0.2348	0.0400	0.0217	0.0086	9.26%	8.53%	0.0113	4.97%
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (0.3%)	11	11	0.2494	0.0249	0.2485	0.0400	0.0259	0.0098	10.43%	8.06%	0.0073	4.93%
165.99	Acid Soluble Boron , Other (0.3%)	20	19	0.2531	0.0455	0.2547	0.0400	0.0318	0.0091	12.51%	7.86%	0.0107	4.91%
171.10	Water Soluble Boron , Spectrophotometric (%)	11	10	0.1398	0.0377	0.1378		0.0380	0.0150	27.57%		0.0086	5.39%
171.99	Water Soluble Boron , Other (%)	2	2	0.2450	0.0141								
181.30	Acid Soluble Cadmium , ICP (ppm)	10	9	146.8	48.47	148.8		50.51	21.05	33.95%		4.281	7.53%
181.32	Acid Soluble Cadmium , ICP, 2006.03 (ppm)	1		176.9									
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9:3..	5	5	173.0	19.53	173.0		19.53	10.92	11.29%		5.319	7.37%
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	2	2	167.8	15.14								
181.99	Acid Soluble Cadmium , Other (ppm)	3	3	148.2	24.75	148.2		24.75	17.86	16.71%		0.3700	7.54%
191.30	Acid Soluble Chromium , ICP (ppm)	9	9	346.9	74.42	349.0		79.62	33.18	22.82%		15.14	6.63%
191.32	Acid Soluble Chromium , ICP, 2006.03 (ppm)	1		421.2									
191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9:...	5	5	415.3	28.54	415.3		28.54	15.96	6.87%		5.936	6.46%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppn)	2	2	401.3	12.32								
191.99	Acid Soluble Chromium , Other (ppm)	3	3	303.8	22.72	303.8		22.72	16.40	7.48%		11.19	6.77%
202.30	Acid Soluble Cobalt , ICP (ppm)	5	5	271.5	57.55	271.5		57.55	32.17	21.20%		9.200	6.88%
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	2	2	297.8	20.93								
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3 ... (f	5	5	310.0	26.39	310.0		26.39	14.75	8.51%		5.820	6.75%
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	3	3	251.4	85.25	251.4		85.25	61.52	33.91%		25.82	6.96%
202.99	Acid Soluble Cobalt , Other (ppm)	4	4	278.9	35.43	278.9		35.43	22.15	12.70%		9.350	6.85%
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.1%)	4	4	0.0351	0.0131	0.0351	0.0076	0.0131	0.0082	37.35%	10.89%	0.0018	6.62%
221.30	Acid Soluble Copper , ICP, test portion inorganic ... (0.	17	16	0.0261	0.0037	0.0263	0.0076	0.0039	0.0012	14.76%	14.55%	0.0010	6.92%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-C... (	4	4	128.8	257.5	128.8	0.0076	257.5	160.9	199.96%	0.00%	7.500	1.93%
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-C... (	8	8	0.0254	0.0021	0.0251	0.0076	0.0011	0.0005	4.21%	15.21%	0.0010	6.96%
221.99	Acid Soluble Copper , Other (0.1%)	8	8	0.0351	0.0265	0.0272	0.0076	0.0039	0.0017	14.44%	14.06%	0.0059	6.88%
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.5%)	7	7	0.5078	0.0602	0.5078	0.0600	0.0683	0.0322	13.44%	5.91%	0.0149	4.43%
241.30	Acid Soluble Iron , ICP, test portion inorganic 965... (0.!	18	17	0.5672	0.0409	0.5671	0.0600	0.0452	0.0137	7.97%	5.29%	0.0149	4.36%
241.32	Acid Soluble Iron , ICP, test portion 2006.03A-C (0.5%	4	4	0.5701	0.1077	0.5701	0.0600	0.1077	0.0673	18.89%	5.26%	0.0161	4.35%
241.33	Acid Soluble Iron , ICP, test portion 2006.03A-C, w... (C	12	11	0.5585	0.0293	0.5583	0.0600	0.0327	0.0123	5.85%	5.37%	0.0097	4.37%
241.99	Acid Soluble Iron , Other (0.5%)	9	9	0.5202	0.0717	0.5260	0.0600	0.0674	0.0281	12.82%	5.70%	0.0236	4.41%
251.30	Acid Soluble Lead , ICP (ppm)	10	10	753.4	205.3	757.4		223.9	88.51	29.57%		33.03	5.90%
251.32	Acid Soluble Lead , ICP, 2006.03 (ppm)	1		906.9									
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 HN...	5	5	957.6	112.6	957.6		112.6	62.92	11.75%		38.07	5.69%
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	2	2	1,027	89.87								
251.99	Acid Soluble Lead , Other (ppm)	3	3	760.8	206.9	760.8		206.9	149.3	27.20%		6.107	5.89%
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (0.3%)	4	4	0.0272	0.0025	0.0272	0.0076	0.0025	0.0016	9.27%	14.03%	0.0040	6.88%
261.30	Acid Soluble Manganese , ICP, test portion 972.02a...	9	9	0.0344	0.0285	0.0258	0.0076	0.0044	0.0018	17.19%	14.76%	0.0006	6.93%
261.31	Acid Soluble Manganese , ICP, test portion 972.02b...	3	3	0.0269	0.0028	0.0269	0.0076	0.0028	0.0020	10.45%	14.18%	0.0013	6.89%
261.32	Acid Soluble Manganese , ICP, test portion inorgan... (5	5	32.75	73.09	32.75	0.0076	73.09	40.86	223.18%	0.01%	2.656	2.37%

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261.33	Acid Soluble Manganese , ICP, test portion organic...	1		0.0263									
261.34	Acid Soluble Manganese , ICP, test portion 2006.03...	4	4	0.0253	0.0021	0.0253	0.0076	0.0021	0.0013	8.21%	15.07%	0.0006	6.96%
261.35	Acid Soluble Manganese , ICP, test portion 2006.03...	8	8	0.0557	0.0887	0.0260	0.0076	0.0047	0.0021	18.09%	14.64%	0.0082	6.93%
261.99	Acid Soluble Manganese , Other (0.3%)	8	8	0.0553	0.0868	0.0253	0.0076	0.0035	0.0015	13.75%	15.04%	0.0028	6.95%
271.00	Water Soluble Manganese , AA (%)	1		0.0140									
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	2	2	0.0133	0.0004								
281.00	Acid Soluble Mercury , AA (ppm)	1		25.59									
281.30	Acid Soluble Mercury , ICP (ppm)	4	4	15.94	16.90	15.94		16.90	10.56	106.01%		0.9650	10.55%
281.99	Acid Soluble Mercury , Other (ppm)	2	2	18.95	14.38								
289.30	Acid Soluble Molybdenum , ICP (100ppm)	10	10	572.0	126.7	594.6	186.3773	79.65	31.48	13.40%	15.67%	24.50	6.12%
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (100ppm)	2	2	613.8	30.79								
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w/..	8	8	653.5	86.68	653.5	186.3773	98.30	43.44	15.04%	14.26%	29.45	6.03%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (1	3	3	558.9	239.2	558.9	186.3773	239.2	172.6	42.80%	16.67%	65.66	6.17%
289.99	Acid Soluble Molybdenum , Other (100ppm)	3	3	504.1	452.5	504.1	186.3773	452.5	326.6	89.77%	18.49%	6.331	6.27%
291.30	Acid Soluble Nickel , ICP (ppm)	7	7	20.64	5.070	20.64		5.749	2.716	27.85%		0.6114	10.14%
291.32	Acid Soluble Nickel , ICP, 2006.03 (ppm)	1		23.68									
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3 ... (p	5	5	26.14	2.230	26.14		2.230	1.247	8.53%		6.555	9.79%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	3	3	22.50	12.85	22.50		12.85	9.271	57.10%		3.586	10.01%
291.99	Acid Soluble Nickel , Other (ppm)	4	4	19.05	7.950	19.05		7.950	4.969	41.72%		3.113	10.27%
301.30	Acid Soluble Selenium , ICP (ppm)	3	3	207.4	148.8	207.4		148.8	107.4	71.73%		10.75	7.17%
301.32	Acid Soluble Selenium , ICP, 2006.03 (ppm)	1		381.3									
301.33	Acid Soluble Selenium , ICP, 2006.03 modified w/9:...	4	4	388.9	25.70	388.9		25.70	16.06	6.61%		5.350	6.52%
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	2	2	347.3	36.36								
301.99	Acid Soluble Selenium , Other (ppm)	4	4	250.6	109.6	250.6		109.6	68.51	43.73%		3.925	6.97%
311.32	Sodium, ICP, 2006.03 test portion (%)	2	2	0.6893	0.0004								
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test .	4	4	0.7350	0.0751	0.7350		0.0751	0.0470	10.22%		0.0102	4.19%
311.99	Sodium, Other (%)	3	3	0.7458	0.0413	0.7458		0.0413	0.0298	5.53%		0.0303	4.18%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	13	13	1.187	0.0676	1.177	0.1222	0.0525	0.0182	4.46%	5.19%	0.0272	3.90%
321.30	Acid Soluble Zinc , ICP, test portion inorganic 96... (1.3	18	17	1.163	0.0511	1.162	0.1222	0.0546	0.0165	4.69%	5.25%	0.0358	3.91%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C ... (1.	5	5	1.152	0.1235	1.152	0.1222	0.1235	0.0690	10.72%	5.30%	0.0116	3.92%
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, ... (1.	13	13	1.168	0.0958	1.181	0.1222	0.0718	0.0249	6.08%	5.17%	0.0785	3.90%
321.99	Acid Soluble Zinc , Other (1.3%)	9	9	1.185	0.2020	1.168	0.1222	0.1209	0.0504	10.35%	5.23%	0.0462	3.91%
325.00	Water Soluble Zinc , AA (%)	5	5	0.4798	0.1382	0.4798		0.1382	0.0773	28.80%		0.0284	4.47%
325.30	Water Soluble Zinc , ICP (%)	2	2	0.8650	0.6152								

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 171211

Grade 5-15-30

Method Precision Report

Issue Date : 01/31/2018

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 (%)	12	12	4.270	0.1068	0.1036	0.0371	0.1100	2.43%	0.87%	2.58%	2.966
001.99	Ammoniacal Nitrogen, Other (%)	21	20	4.372	0.1233	0.1200	0.0400	0.1265	2.74%	0.91%	2.89%	3.163
002.99	Nitrate Nitrogen, Other (%)	17	15	0.7136	0.0598	0.0543	0.0354	0.0649	7.61%	4.96%	9.09%	1.831
010.60	Total Nitrogen, Combustion (5%)	54	49	5.159	0.1206	0.1122	0.0625	0.1284	2.17%	1.21%	2.49%	2.055
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	17	14	15.87	0.4382	0.4343	0.0823	0.4421	2.74%	0.52%	2.79%	5.370
020.50	Total Phosphorus as P2O5, ICP (%)	19	16	15.67	0.6322	0.6185	0.1855	0.6457	3.95%	1.18%	4.12%	3.481
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-EDTA Ext. (15%)	9	9	15.12	0.2059	0.1598	0.1836	0.2434	1.06%	1.21%	1.61%	1.326
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (15%)	13	13	15.09	0.3216	0.3129	0.1050	0.3301	2.07%	0.70%	2.19%	3.143
041.99	Direct Available Phosphorus as P2O5, Other (15%)	11	11	15.11	0.2449	0.2343	0.1008	0.2550	1.55%	0.67%	1.69%	2.529
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	9	9	30.44	0.3551	0.3336	0.1723	0.3755	1.10%	0.57%	1.23%	2.179
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	10	10	30.84	0.7952	0.7660	0.3020	0.8234	2.48%	0.98%	2.67%	2.727
050.99	Soluble Potassium as K2O, Other (30%)	36	33	30.50	0.7090	0.6545	0.3855	0.7596	2.15%	1.26%	2.49%	1.970
101.30	Acid Soluble Calcium, ICP, test portion inorganic 965.09 (1%)	16	14	0.3731	0.0771	0.0767	0.0115	0.0775	20.55%	3.08%	20.78%	6.755
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C, w/dual acid (1%)	10	9	0.3587	0.0215	0.0205	0.0091	0.0225	5.73%	2.54%	6.27%	2.465
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (1.2%)	18	18	1.189	0.1019	0.1006	0.0232	0.1032	8.46%	1.95%	8.68%	4.451
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A-C, w/dual acid (1.2%)	12	11	1.167	0.0583	0.0560	0.0229	0.0605	4.80%	1.96%	5.18%	2.638
148.01	Total Sulfur, Gravimetric - sulfate and elemental (5%)	10	9	5.168	0.9430	0.9401	0.1049	0.9459	18.19%	2.03%	18.30%	9.021
148.07	Total Sulfur, ICP, test portion as in 2006.03 modified w/9:3 HNO3:HCl (5%)	11	11	5.275	1.018	1.016	0.0714	1.019	19.27%	1.35%	19.32%	14.28
148.99	Total Sulfur, Other (5%)	12	12	5.574	0.6341	0.6200	0.1881	0.6480	11.12%	3.38%	11.63%	3.444
165.00	Acid Soluble Boron , Spectrophotometric (0.3%)	11	9	0.2387	0.0170	0.0153	0.0105	0.0186	6.41%	4.41%	7.78%	1.764
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (0.3%)	11	10	0.2514	0.0253	0.0250	0.0056	0.0256	9.94%	2.23%	10.19%	4.574
165.99	Acid Soluble Boron , Other (0.3%)	20	17	0.2543	0.0254	0.0242	0.0111	0.0266	9.51%	4.36%	10.46%	2.400
171.10	Water Soluble Boron , Spectrophotometric (%)	11	10	0.1398	0.0377	0.0373	0.0070	0.0380	26.71%	5.00%	27.18%	5.433
181.30	Acid Soluble Cadmium , ICP (ppm)	10	9	146.8	48.47	48.39	3.744	48.54	32.96%	2.55%	33.06%	12.96
191.30	Acid Soluble Chromium , ICP (ppm)	9	9	346.9	74.42	73.77	13.89	75.07	21.27%	4.00%	21.64%	5.406
221.30	Acid Soluble Copper , ICP, test portion inorganic 965.09 (0.1%)	17	15	0.0262	0.0038	0.0037	0.0009	0.0038	14.32%	3.27%	14.69%	4.496
241.30	Acid Soluble Iron, ICP, test portion inorganic 965.09 (0.5%)	18	16	0.5660	0.0419	0.0412	0.0108	0.0426	7.29%	1.91%	7.53%	3.943
241.33	Acid Soluble Iron, ICP, test portion 2006.03A-C, w/dual acid (0.5%)	12	11	0.5585	0.0293	0.0287	0.0081	0.0298	5.14%	1.46%	5.34%	3.669
241.99	Acid Soluble Iron, Other (0.5%)	9	9	0.5202	0.0717	0.0700	0.0219	0.0734	13.46%	4.21%	14.10%	3.354
251.30	Acid Soluble Lead , ICP (ppm)	10	9	731.5	205.0	204.4	21.54	205.6	27.95%	2.94%	28.10%	9.546

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
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (0.3%)	9	8	0.0250	0.0032	0.0032	0.0006	0.0033	12.77%	2.56%	13.02%	5.091
289.30	Acid Soluble Molybdenum , ICP (100ppm)	10	9	607.8	59.73	57.42	23.28	61.95	9.45%	3.83%	10.19%	2.662
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w/9:3 HNO3:HCl (100ppm)	8	8	653.5	86.68	84.70	26.07	88.62	12.96%	3.99%	13.56%	3.399
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	13	13	1.187	0.0676	0.0655	0.0237	0.0697	5.52%	1.99%	5.87%	2.943
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (1.3%)	18	16	1.164	0.0528	0.0509	0.0198	0.0546	4.37%	1.70%	4.69%	2.764
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, w/dual acid (1.3%)	13	12	1.190	0.0569	0.0369	0.0611	0.0714	3.11%	5.14%	6.00%	1.169
321.99	Acid Soluble Zinc , Other (1.3%)	9	8	1.130	0.1243	0.1200	0.0456	0.1284	10.62%	4.03%	11.36%	2.817

Notes: Precision data calculated when 8 or more Tests included.

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Methods: 149

Sample # 171211

Lab Values

Labs Reporting: 91

Grade 5-15-30

Issue Date : 01/31/2018

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 (%)	0309	4.115	0.0100	4.270	0.1211	0.0404	12	-1.28	2%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0231	4.120	0.0200	4.270	0.1211	0.0404	12	-1.24	2%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0444	4.190	0.0200	4.270	0.1211	0.0404	12	-0.66	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0177	4.198	0.0245	4.270	0.1211	0.0404	12	-0.59	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0117	4.250	0.1000	4.270	0.1211	0.0404	12	-0.16	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0451	4.265	0.0700	4.270	0.1211	0.0404	12	-0.04	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0486	4.285	0.0300	4.270	0.1211	0.0404	12	0.12	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0531	4.290	0.0200	4.270	0.1211	0.0404	12	0.17	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0536	4.290	0.0200	4.270	0.1211	0.0404	12	0.17	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0535	4.350	0.1000	4.270	0.1211	0.0404	12	0.66	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0169	4.435	0.0700	4.270	0.1211	0.0404	12	1.36	2%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0405	4.450	0.0000	4.270	0.1211	0.0404	12	1.49	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	4.133	0.0400	4.383	0.1391	0.0444	21	-1.80	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0368	4.170	0.0600	4.383	0.1391	0.0444	21	-1.53	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0519	4.270	0.0200	4.383	0.1391	0.0444	21	-0.81	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0532	4.275	0.0100	4.383	0.1391	0.0444	21	-0.78	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0536	4.295	0.0300	4.383	0.1391	0.0444	21	-0.63	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0531	4.300	0.0200	4.383	0.1391	0.0444	21	-0.60	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0533	4.320	0.0200	4.383	0.1391	0.0444	21	-0.45	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0537	4.336	0.0930	4.383	0.1391	0.0444	21	-0.34	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0513	4.350	0.0200	4.383	0.1391	0.0444	21	-0.24	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0535	4.350	0.1000	4.383	0.1391	0.0444	21	-0.24	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0539	4.350	0.0800	4.383	0.1391	0.0444	21	-0.24	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0027	4.360	0.0000	4.383	0.1391	0.0444	21	-0.17	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0371	4.385	0.0300	4.383	0.1391	0.0444	21	0.01	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0538	4.425	0.0500	4.383	0.1391	0.0444	21	0.30	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0540	4.425	0.0500	4.383	0.1391	0.0444	21	0.30	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	4.490	0.0200	4.383	0.1391	0.0444	21	0.77	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0255	4.510	0.1000	4.383	0.1391	0.0444	21	0.91	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0522	4.530	0.0200	4.383	0.1391	0.0444	21	1.06	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0510	4.542	0.0003	4.383	0.1391	0.0444	21	1.14	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	4.620	0.1200	4.383	0.1391	0.0444	21	1.70	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0501	4.855	0.0500	4.383	0.1391	0.0444	21	3.39	5%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
002.20	Nitrate Nitrogen, Jones Modified (%)	0029	4.445	0.0120				1			0
002.99	Nitrate Nitrogen, Other (%)	0394	0.6090	0.0180	0.7302	0.0826	0.0410	17	-1.47	8%	0
002.99	Nitrate Nitrogen, Other (%)	0027	0.6350	0.0100	0.7302	0.0826	0.0410	17	-1.15	7%	0
002.99	Nitrate Nitrogen, Other (%)	0029	0.6450	0.0100	0.7302	0.0826	0.0410	17	-1.03	6%	0
002.99	Nitrate Nitrogen, Other (%)	0538	0.6800	0.0400	0.7302	0.0826	0.0410	17	-0.61	3%	0
002.99	Nitrate Nitrogen, Other (%)	0231	0.6800	0.0000	0.7302	0.0826	0.0410	17	-0.61	3%	0
002.99	Nitrate Nitrogen, Other (%)	0501	0.7000	0.0000	0.7302	0.0826	0.0410	17	-0.37	2%	0
002.99	Nitrate Nitrogen, Other (%)	0533	0.7100	0.0400	0.7302	0.0826	0.0410	17	-0.24	1%	0
002.99	Nitrate Nitrogen, Other (%)	0539	0.7150	0.0100	0.7302	0.0826	0.0410	17	-0.18	1%	0
002.99	Nitrate Nitrogen, Other (%)	0486	0.7200	0.0000	0.7302	0.0826	0.0410	17	-0.12	1%	0
002.99	Nitrate Nitrogen, Other (%)	0540	0.7200	0.0400	0.7302	0.0826	0.0410	17	-0.12	1%	0
002.99	Nitrate Nitrogen, Other (%)	0532	0.7250	0.0300	0.7302	0.0826	0.0410	17	-0.06	0%	0
002.99	Nitrate Nitrogen, Other (%)	0536	0.7750	0.1500	0.7302	0.0826	0.0410	17	0.54	3%	0
002.99	Nitrate Nitrogen, Other (%)	0535	0.7750	0.0500	0.7302	0.0826	0.0410	17	0.54	3%	0
002.99	Nitrate Nitrogen, Other (%)	0531	0.7950	0.0100	0.7302	0.0826	0.0410	17	0.78	4%	0
002.99	Nitrate Nitrogen, Other (%)	0537	0.8207	0.0789	0.7302	0.0826	0.0410	17	1.10	6%	0
002.99	Nitrate Nitrogen, Other (%)	0506	0.9050	0.1700	0.7302	0.0826	0.0410	17	2.12	12%	0
002.99	Nitrate Nitrogen, Other (%)	0513	0.9900	0.0400	0.7302	0.0826	0.0410	17	3.14	18%	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0444	5.030	0.0000	5.118	0.0814	0.0725	4	-1.08	1%	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0169	5.075	0.0500	5.118	0.0814	0.0725	4	-0.53	0%	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0537	5.156	0.0141	5.118	0.0814	0.0725	4	0.47	0%	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0397	5.212	0.2260	5.118	0.0814	0.0725	4	1.15	1%	0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0518	5.250	0.1000				2			0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0513	5.340	0.0200				2			0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0114	4.545*	0.0500	4.968	0.2215	0.0536	6	-1.70	4%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0309	4.835	0.0700	4.968	0.2215	0.0536	6	-0.54	1%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0105	5.025	0.0900	4.968	0.2215	0.0536	6	0.23	1%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0531	5.060	0.0200	4.968	0.2215	0.0536	6	0.37	1%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0510	5.109	0.0015	4.968	0.2215	0.0536	6	0.57	1%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0540	5.145	0.0900	4.968	0.2215	0.0536	6	0.71	2%	0
010.12	Total Nitrogen, Salicylic (5%)	0534	5.160	0.0000				2			0
010.12	Total Nitrogen, Salicylic (5%)	0397	5.186	0.1970				2			0
010.16	Total Nitrogen, Raney (5%)	0300	4.760	0.0400				1			0
010.60	Total Nitrogen, Combustion (5%)	0541	4.485*	0.0100	5.160	0.1335	0.0700	52	-5.05	7%	0
010.60	Total Nitrogen, Combustion (5%)	0041	4.940	0.0600	5.160	0.1335	0.0700	52	-1.65	2%	0
010.60	Total Nitrogen, Combustion (5%)	0055	4.945	0.1100	5.160	0.1335	0.0700	52	-1.61	2%	0
010.60	Total Nitrogen, Combustion (5%)	0390	4.985	0.0900	5.160	0.1335	0.0700	52	-1.31	2%	0
010.60	Total Nitrogen, Combustion (5%)	0034	4.995	0.0300	5.160	0.1335	0.0700	52	-1.23	2%	0
010.60	Total Nitrogen, Combustion (5%)	0072	5.005	0.0300	5.160	0.1335	0.0700	52	-1.16	1%	0
010.60	Total Nitrogen, Combustion (5%)	0521	5.010	0.0000	5.160	0.1335	0.0700	52	-1.12	1%	0
010.60	Total Nitrogen, Combustion (5%)	0292	5.025	0.0100	5.160	0.1335	0.0700	52	-1.01	1%	0
010.60	Total Nitrogen, Combustion (5%)	0307	5.035	0.1700	5.160	0.1335	0.0700	52	-0.93	1%	0
010.60	Total Nitrogen, Combustion (5%)	0423	5.040	0.1200	5.160	0.1335	0.0700	52	-0.90	1%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS	Threshold	Flag
			Value	Range	Rob Mean	Rob SD	R-bar		Z Score	%RSD	
010.60	Total Nitrogen, Combustion (5%)	0523	5.050	0.1000	5.160	0.1335	0.0700	52	-0.82	1%	0
010.60	Total Nitrogen, Combustion (5%)	0368	5.083	0.0660	5.160	0.1335	0.0700	52	-0.57	1%	0
010.60	Total Nitrogen, Combustion (5%)	0234	5.085	0.0700	5.160	0.1335	0.0700	52	-0.56	1%	0
010.60	Total Nitrogen, Combustion (5%)	0451	5.089	0.0490	5.160	0.1335	0.0700	52	-0.53	1%	0
010.60	Total Nitrogen, Combustion (5%)	0483	5.095	0.0300	5.160	0.1335	0.0700	52	-0.48	1%	0
010.60	Total Nitrogen, Combustion (5%)	0105	5.100	0.0600	5.160	0.1335	0.0700	52	-0.45	1%	0
010.60	Total Nitrogen, Combustion (5%)	0501	5.100	0.0000	5.160	0.1335	0.0700	52	-0.45	1%	0
010.60	Total Nitrogen, Combustion (5%)	0324	5.110	0.0200	5.160	0.1335	0.0700	52	-0.37	0%	0
010.60	Total Nitrogen, Combustion (5%)	0043	5.115	0.0100	5.160	0.1335	0.0700	52	-0.33	0%	0
010.60	Total Nitrogen, Combustion (5%)	0472	5.115	0.0700	5.160	0.1335	0.0700	52	-0.33	0%	0
010.60	Total Nitrogen, Combustion (5%)	0037	5.118	0.0220	5.160	0.1335	0.0700	52	-0.31	0%	0
010.60	Total Nitrogen, Combustion (5%)	0377	5.130	0.1600	5.160	0.1335	0.0700	52	-0.22	0%	0
010.60	Total Nitrogen, Combustion (5%)	0389	5.130	0.1000	5.160	0.1335	0.0700	52	-0.22	0%	0
010.60	Total Nitrogen, Combustion (5%)	0073	5.145	0.0100	5.160	0.1335	0.0700	52	-0.11	0%	0
010.60	Total Nitrogen, Combustion (5%)	0136	5.145	0.0300	5.160	0.1335	0.0700	52	-0.11	0%	0
010.60	Total Nitrogen, Combustion (5%)	0007	5.150	0.1000	5.160	0.1335	0.0700	52	-0.07	0%	0
010.60	Total Nitrogen, Combustion (5%)	0027	5.150	0.1000	5.160	0.1335	0.0700	52	-0.07	0%	0
010.60	Total Nitrogen, Combustion (5%)	0527	5.155	0.0030	5.160	0.1335	0.0700	52	-0.04	0%	0
010.60	Total Nitrogen, Combustion (5%)	0356	5.155	0.0300	5.160	0.1335	0.0700	52	-0.03	0%	0
010.60	Total Nitrogen, Combustion (5%)	0291	5.155	0.0100	5.160	0.1335	0.0700	52	-0.03	0%	0
010.60	Total Nitrogen, Combustion (5%)	0177	5.167	0.1010	5.160	0.1335	0.0700	52	0.05	0%	0
010.60	Total Nitrogen, Combustion (5%)	0360	5.170	0.0200	5.160	0.1335	0.0700	52	0.08	0%	0
010.60	Total Nitrogen, Combustion (5%)	0231	5.175	0.0300	5.160	0.1335	0.0700	52	0.11	0%	0
010.60	Total Nitrogen, Combustion (5%)	0486	5.180	0.0000	5.160	0.1335	0.0700	52	0.15	0%	0
010.60	Total Nitrogen, Combustion (5%)	0086	5.190	0.0757	5.160	0.1335	0.0700	52	0.23	0%	0
010.60	Total Nitrogen, Combustion (5%)	0035	5.200	0.0800	5.160	0.1335	0.0700	52	0.30	0%	0
010.60	Total Nitrogen, Combustion (5%)	0040	5.200	0.0000	5.160	0.1335	0.0700	52	0.30	0%	0
010.60	Total Nitrogen, Combustion (5%)	0405	5.220	0.0800	5.160	0.1335	0.0700	52	0.45	1%	0
010.60	Total Nitrogen, Combustion (5%)	0157	5.235	0.0100	5.160	0.1335	0.0700	52	0.56	1%	0
010.60	Total Nitrogen, Combustion (5%)	0482	5.260	0.0000	5.160	0.1335	0.0700	52	0.75	1%	0
010.60	Total Nitrogen, Combustion (5%)	0025	5.279	0.2250	5.160	0.1335	0.0700	52	0.89	1%	0
010.60	Total Nitrogen, Combustion (5%)	0494	5.290	0.0400	5.160	0.1335	0.0700	52	0.98	1%	0
010.60	Total Nitrogen, Combustion (5%)	0444	5.295	0.0300	5.160	0.1335	0.0700	52	1.01	1%	0
010.60	Total Nitrogen, Combustion (5%)	0443	5.300	0.0000	5.160	0.1335	0.0700	52	1.05	1%	0
010.60	Total Nitrogen, Combustion (5%)	0325	5.300	0.2000	5.160	0.1335	0.0700	52	1.05	1%	0
010.60	Total Nitrogen, Combustion (5%)	0096	5.340	0.0200	5.160	0.1335	0.0700	52	1.35	2%	0
010.60	Total Nitrogen, Combustion (5%)	0102	5.355	0.2100	5.160	0.1335	0.0700	52	1.46	2%	0
010.60	Total Nitrogen, Combustion (5%)	0354	5.385	0.0520	5.160	0.1335	0.0700	52	1.69	2%	0
010.60	Total Nitrogen, Combustion (5%)	0402	5.395	0.0700	5.160	0.1335	0.0700	52	1.76	2%	0
010.60	Total Nitrogen, Combustion (5%)	0029	5.410	0.4260	5.160	0.1335	0.0700	52	1.87	2%	0
010.60	Total Nitrogen, Combustion (5%)	0260	5.493	0.2205	5.160	0.1335	0.0700	52	2.50	3%	0
010.60	Total Nitrogen, Combustion (5%)	0106	5.690	0.0800	5.160	0.1335	0.0700	52	3.97	5%	0
010.60	Total Nitrogen, Combustion (5%)	0516	5.595	0.6500	5.160	0.1335	0.0700	52	3.26	4%	1

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010.60	Total Nitrogen, Combustion (5%)	0255	5.812	1.165	5.160	0.1335	0.0700	52	4.88	6%	1
010.99	Total Nitrogen, Other (5%)	0522	4.780	0.0200	5.120	0.2964	0.0430	6	-1.02	3%	0
010.99	Total Nitrogen, Other (5%)	0519	4.945	0.0100	5.120	0.2964	0.0430	6	-0.53	2%	0
010.99	Total Nitrogen, Other (5%)	0508	5.080	0.0400	5.120	0.2964	0.0430	6	-0.12	0%	0
010.99	Total Nitrogen, Other (5%)	0493	5.100	0.1000	5.120	0.2964	0.0430	6	-0.06	0%	0
010.99	Total Nitrogen, Other (5%)	0476	5.291	0.0381	5.120	0.2964	0.0430	6	0.51	2%	0
010.99	Total Nitrogen, Other (5%)	0506	5.525	0.0500	5.120	0.2964	0.0430	6	1.22	4%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0157	15.50	0.2000	15.69	0.1322	0.1450	4	-1.44	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0493	15.70	0.1000	15.69	0.1322	0.1450	4	0.08	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0114	15.78	0.2300	15.69	0.1322	0.1450	4	0.64	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0444	15.79	0.0500	15.69	0.1322	0.1450	4	0.72	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0476	14.14	0.0688	15.76	0.4983	0.1087	16	-3.24	5%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0027	15.29	0.3900	15.76	0.4983	0.1087	16	-0.95	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0534	15.39	0.0100	15.76	0.4983	0.1087	16	-0.75	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0371	15.50	0.2000	15.76	0.4983	0.1087	16	-0.52	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0394	15.51	0.0160	15.76	0.4983	0.1087	16	-0.49	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	15.54	0.0900	15.76	0.4983	0.1087	16	-0.45	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	15.54	0.0146	15.76	0.4983	0.1087	16	-0.44	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0169	15.66	0.1000	15.76	0.4983	0.1087	16	-0.20	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	15.68	0.0900	15.76	0.4983	0.1087	16	-0.17	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	15.68	0.0600	15.76	0.4983	0.1087	16	-0.16	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	15.80	0.2000	15.76	0.4983	0.1087	16	0.08	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	15.93	0.0300	15.76	0.4983	0.1087	16	0.34	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0300	16.32	0.1900	15.76	0.4983	0.1087	16	1.12	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0506	16.35	0.1000	15.76	0.4983	0.1087	16	1.19	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0541	16.45	0.1800	15.76	0.4983	0.1087	16	1.39	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	16.81	0.0000	15.76	0.4983	0.1087	16	2.11	3%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0516	16.90	1.350	15.76	0.4983	0.1087	16	2.28	4%	1
020.40	Total Phosphorus as P2O5, Automated (%)	0096	15.27	0.2600				2			0
020.40	Total Phosphorus as P2O5, Automated (%)	0035	15.45	0.1500				2			0
020.50	Total Phosphorus as P2O5, ICP (%)	0255	14.47	0.8770	15.58	0.7381	0.2275	17	-1.51	4%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0501	15.05	0.1000	15.58	0.7381	0.2275	17	-0.72	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0368	15.07	0.1112	15.58	0.7381	0.2275	17	-0.70	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0521	15.11	0.0000	15.58	0.7381	0.2275	17	-0.64	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	15.12	0.1000	15.58	0.7381	0.2275	17	-0.63	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0423	15.27	0.1700	15.58	0.7381	0.2275	17	-0.43	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	15.28	0.2200	15.58	0.7381	0.2275	17	-0.41	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	15.29	0.2000	15.58	0.7381	0.2275	17	-0.40	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	15.35	0.5000	15.58	0.7381	0.2275	17	-0.32	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0433	15.42	0.0700	15.58	0.7381	0.2275	17	-0.23	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0523	15.55	0.1000	15.58	0.7381	0.2275	17	-0.05	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0157	15.70	0.2000	15.58	0.7381	0.2275	17	0.16	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	15.91	0.1200	15.58	0.7381	0.2275	17	0.44	1%	0

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020.50	Total Phosphorus as P2O5, ICP (%)	0451	16.47	0.0000	15.58	0.7381	0.2275	17	1.20	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0527	16.50	0.0800	15.58	0.7381	0.2275	17	1.24	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0390	16.76	0.7400	15.58	0.7381	0.2275	17	1.59	4%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0402	16.86	0.2800	15.58	0.7381	0.2275	17	1.73	4%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	15.26	2.100	15.58	0.7381	0.2275	17	-0.44	1%	1
020.50	Total Phosphorus as P2O5, ICP (%)	0291	31.97	0.0100	15.58	0.7381	0.2275	17	22.19	53%	2
020.99	Total Phosphorus as P2O5, Other (%)	0455	12.60	0.0100	15.92	2.340	0.0720	5	-1.24	10%	0
020.99	Total Phosphorus as P2O5, Other (%)	0519	15.14	0.0200	15.92	2.340	0.0720	5	-0.29	2%	0
020.99	Total Phosphorus as P2O5, Other (%)	0513	15.54	0.0900	15.92	2.340	0.0720	5	-0.14	1%	0
020.99	Total Phosphorus as P2O5, Other (%)	0443	18.09	0.0000	15.92	2.340	0.0720	5	0.81	7%	0
020.99	Total Phosphorus as P2O5, Other (%)	0307	18.24	0.2400	15.92	2.340	0.0720	5	0.87	7%	0
020.99	Total Phosphorus as P2O5, Other (%)	0515	15.76	0.9421	15.92	2.340	0.0720	5	-0.06	1%	1
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	0.1700	0.0800				1			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (15%)	0405	15.56	0.0800				2			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (15%)	0300	16.00	0.0500				2			0
040.40	Indirect Available Phosphorus as P2O5, Automa... (15%)	0096	15.11	0.3500				1			0
040.99	Indirect Available Phosphorus as P2O5, Other (15%)	0394	15.32	0.0050				1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (15%)	0009	14.50	1.000	15.14	0.4647	0.3624	4	-1.39	2%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (15%)	0055	15.18	0.0200	15.14	0.4647	0.3624	4	0.08	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (15%)	0177	15.30	0.4295	15.14	0.4647	0.3624	4	0.33	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (15%)	0102	15.60	0.0000	15.14	0.4647	0.3624	4	0.98	2%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (15%)	0513	15.05	0.0600				2			0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (15%)	0117	15.35	0.1000				2			0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (15%)	0027	14.63	0.4900				1			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (15%)	0106	14.63	0.5900	15.08	0.4960	0.1900	5	-0.91	1%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (15%)	0394	14.76	0.1600	15.08	0.4960	0.1900	5	-0.64	1%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (15%)	0522	15.04	0.0400	15.08	0.4960	0.1900	5	-0.07	0%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (15%)	0535	15.05	0.1000	15.08	0.4960	0.1900	5	-0.05	0%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (15%)	0544	15.90	0.0600	15.08	0.4960	0.1900	5	1.66	3%	0
041.40	Direct Available Phosphorus as P2O5, Automate... (15%)	0095	15.82	0.2900				1			0
041.50	Direct Available Phosphorus as P2O5, ICP (15%)	0325	14.95	0.3000				2			0
041.50	Direct Available Phosphorus as P2O5, ICP (15%)	0007	15.30	0.0000				2			0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0368	14.75	0.0449	15.12	0.2250	0.2163	9	-1.53	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0423	14.93	0.1500	15.12	0.2250	0.2163	9	-0.81	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0072	14.94	0.2000	15.12	0.2250	0.2163	9	-0.75	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0037	15.10	0.3020	15.12	0.2250	0.2163	9	-0.09	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0025	15.20	0.3900	15.12	0.2250	0.2163	9	0.30	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0377	15.22	0.1600	15.12	0.2250	0.2163	9	0.40	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0117	15.26	0.0600	15.12	0.2250	0.2163	9	0.56	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0360	15.33	0.1400	15.12	0.2250	0.2163	9	0.85	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (15%)	0040	15.35	0.5000	15.12	0.2250	0.2163	9	0.93	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (15%)	0029	14.59	0.2200	15.09	0.3647	0.1117	13	-1.37	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (15%)	0472	14.61	0.0800	15.09	0.3647	0.1117	13	-1.32	2%	0

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041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0397	14.67	0.1700	15.09	0.3647	0.1117	13	-1.17	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0177	14.99	0.0415	15.09	0.3647	0.1117	13	-0.27	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0055	15.00	0.3400	15.09	0.3647	0.1117	13	-0.25	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0231	15.12	0.0100	15.09	0.3647	0.1117	13	0.07	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0073	15.13	0.1500	15.09	0.3647	0.1117	13	0.09	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0034	15.14	0.0080	15.09	0.3647	0.1117	13	0.14	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0043	15.15	0.0100	15.09	0.3647	0.1117	13	0.15	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0136	15.32	0.1600	15.09	0.3647	0.1117	13	0.63	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0354	15.42	0.0470	15.09	0.3647	0.1117	13	0.90	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0072	15.49	0.1850	15.09	0.3647	0.1117	13	1.09	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (15%)	0486	15.58	0.0300	15.09	0.3647	0.1117	13	1.33	2%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0519	14.57	0.0400	15.11	0.1439	0.1173	11	-3.51	2%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0536	15.01	0.1600	15.11	0.1439	0.1173	11	-0.65	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0533	15.05	0.0300	15.11	0.1439	0.1173	11	-0.42	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0535	15.05	0.1000	15.11	0.1439	0.1173	11	-0.39	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0538	15.06	0.0400	15.11	0.1439	0.1173	11	-0.32	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0531	15.06	0.0200	15.11	0.1439	0.1173	11	-0.32	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0532	15.12	0.1400	15.11	0.1439	0.1173	11	0.07	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0539	15.12	0.1400	15.11	0.1439	0.1173	11	0.07	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0518	15.25	0.3000	15.11	0.1439	0.1173	11	0.91	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0537	15.27	0.1200	15.11	0.1439	0.1173	11	1.04	1%	0
041.99	Direct Available Phosphorus as P2O5, Other (15%)	0540	15.60	0.2000	15.11	0.1439	0.1173	11	3.19	2%	0
048.10	Water Soluble Phosphorus as P2O5, Gravimetric... (%)	0444	12.91	0.4600				1			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0529	12.54	0.0300				2			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0394	13.08	0.1450				2			0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	12.93	0.0000				1			0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0444	13.17	0.0800				1			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0519	12.84	0.0200				2			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0513	12.90	0.0300				2			0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0544	29.93	0.1000	30.44	0.4027	0.1660	9	-1.17	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0055	30.17	0.0200	30.44	0.4027	0.1660	9	-0.62	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0072	30.19	0.1940	30.44	0.4027	0.1660	9	-0.58	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0522	30.27	0.0500	30.44	0.4027	0.1660	9	-0.40	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0114	30.36	0.4200	30.44	0.4027	0.1660	9	-0.19	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0494	30.43	0.5400	30.44	0.4027	0.1660	9	-0.03	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0102	30.80	0.0000	30.44	0.4027	0.1660	9	0.82	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0405	30.90	0.0600	30.44	0.4027	0.1660	9	1.05	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (30%)	0231	30.93	0.1100	30.44	0.4027	0.1660	9	1.11	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (30%)	0040	30.20	0.6000	31.29	0.9145	0.4920	5	-1.04	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (30%)	0356	30.55	0.1200	31.29	0.9145	0.4920	5	-0.71	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (30%)	0309	31.35	1.150	31.29	0.9145	0.4920	5	0.05	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (30%)	0157	32.10	0.4000	31.29	0.9145	0.4920	5	0.77	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (30%)	0073	32.27	0.1900	31.29	0.9145	0.4920	5	0.93	2%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
050.30	Soluble Potassium as K2O, AA (Oxalate) (30%)	0428	28.05*	3.781	31.29	0.9145	0.4920	5	-3.10	5%	1
050.31	Soluble Potassium as K2O, AA (Citrate) (30%)	0472	23.25*	2.100				1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	0157	29.70	2.400	30.26	0.6669	0.7126	8	-0.77	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	0106	29.79	0.4300	30.26	0.6669	0.7126	8	-0.65	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	0444	29.80	0.9600	30.26	0.6669	0.7126	8	-0.63	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	0390	29.91	0.6300	30.26	0.6669	0.7126	8	-0.49	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	0324	30.10	1.000	30.26	0.6669	0.7126	8	-0.22	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	0292	30.72	0.0000	30.26	0.6669	0.7126	8	0.63	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	0055	30.82	0.2100	30.26	0.6669	0.7126	8	0.76	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (30%)	0397	31.89	0.0710	30.26	0.6669	0.7126	8	2.24	3%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (30%)	0291	15.94*	0.0100	25.77	8.520	0.4067	3	-1.15	19%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (30%)	0483	30.48	1.210	25.77	8.520	0.4067	3	0.55	9%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (30%)	0007	30.90	0.0000	25.77	8.520	0.4067	3	0.60	10%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0072	29.46	0.7500	30.84	0.8899	0.3836	10	-1.45	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0486	29.83	0.1500	30.84	0.8899	0.3836	10	-1.07	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0043	30.35	0.4000	30.84	0.8899	0.3836	10	-0.52	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0423	30.75	0.4000	30.84	0.8899	0.3836	10	-0.10	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0037	30.97	0.4100	30.84	0.8899	0.3836	10	0.13	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0360	31.03	0.1700	30.84	0.8899	0.3836	10	0.19	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0354	31.07	0.3360	30.84	0.8899	0.3836	10	0.24	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0025	31.19	0.3700	30.84	0.8899	0.3836	10	0.36	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0117	31.66	0.6600	30.84	0.8899	0.3836	10	0.85	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (30%)	0377	32.11	0.1900	30.84	0.8899	0.3836	10	1.32	2%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (30%)	0443	15.74*	0.0000	28.39	7.530	0.0341	5	-1.68	22%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (30%)	0455	29.07*	0.0600	28.39	7.530	0.0341	5	0.09	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (30%)	0510	30.47	0.0407	28.39	7.530	0.0341	5	0.28	4%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (30%)	0169	30.79	0.0700	28.39	7.530	0.0341	5	0.32	4%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (30%)	0526	35.89	0.0000	28.39	7.530	0.0341	5	1.00	13%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (30%)	0535	30.90	0.2000				2			0
050.61	Soluble Potassium as K2O, Flame Photometric ... (30%)	0035	30.98	0.5600				2			0
050.62	Soluble Potassium as K2O, Flame Photometric ... (30%)	0095	30.32	1.450				2			0
050.62	Soluble Potassium as K2O, Flame Photometric ... (30%)	0034	30.76	0.1220				2			0
050.99	Soluble Potassium as K2O, Other (30%)	0389	24.97*	0.0200	30.41	0.6747	0.3845	35	-8.07	9%	0
050.99	Soluble Potassium as K2O, Other (30%)	0541	27.00*	0.0000	30.41	0.6747	0.3845	35	-5.06	6%	0
050.99	Soluble Potassium as K2O, Other (30%)	0255	28.77*	1.238	30.41	0.6747	0.3845	35	-2.43	3%	0
050.99	Soluble Potassium as K2O, Other (30%)	0482	29.50	0.8000	30.41	0.6747	0.3845	35	-1.35	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0300	29.71	0.3900	30.41	0.6747	0.3845	35	-1.05	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0521	29.84	0.0000	30.41	0.6747	0.3845	35	-0.84	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0027	29.86	0.5300	30.41	0.6747	0.3845	35	-0.83	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0523	30.00	0.4000	30.41	0.6747	0.3845	35	-0.61	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0537	30.03	1.010	30.41	0.6747	0.3845	35	-0.57	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0519	30.06	0.0700	30.41	0.6747	0.3845	35	-0.53	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0533	30.12	0.0100	30.41	0.6747	0.3845	35	-0.44	0%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
050.99	Soluble Potassium as K2O, Other (30%)	0493	30.15	0.1000	30.41	0.6747	0.3845	35	-0.39	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0539	30.15	0.0600	30.41	0.6747	0.3845	35	-0.39	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0536	30.22	0.1900	30.41	0.6747	0.3845	35	-0.29	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0096	30.24	0.1800	30.41	0.6747	0.3845	35	-0.25	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0518	30.29	0.3700	30.41	0.6747	0.3845	35	-0.19	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0368	30.30	0.4738	30.41	0.6747	0.3845	35	-0.16	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0538	30.35	0.1000	30.41	0.6747	0.3845	35	-0.09	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0532	30.42	0.2100	30.41	0.6747	0.3845	35	0.00	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0540	30.43	0.7400	30.41	0.6747	0.3845	35	0.03	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0433	30.44	0.0000	30.41	0.6747	0.3845	35	0.04	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0394	30.47	0.2760	30.41	0.6747	0.3845	35	0.09	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0325	30.70	1.200	30.41	0.6747	0.3845	35	0.43	0%	0
050.99	Soluble Potassium as K2O, Other (30%)	0402	30.72	0.0800	30.41	0.6747	0.3845	35	0.46	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0476	30.75	0.3909	30.41	0.6747	0.3845	35	0.50	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0531	30.85	0.1000	30.41	0.6747	0.3845	35	0.65	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0371	30.90	0.4000	30.41	0.6747	0.3845	35	0.72	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0535	30.90	0.2000	30.41	0.6747	0.3845	35	0.72	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0307	30.96	0.8300	30.41	0.6747	0.3845	35	0.80	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0506	31.15	0.9000	30.41	0.6747	0.3845	35	1.09	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0444	31.18	0.3600	30.41	0.6747	0.3845	35	1.14	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0527	31.29	0.1300	30.41	0.6747	0.3845	35	1.29	1%	0
050.99	Soluble Potassium as K2O, Other (30%)	0234	31.45	0.1900	30.41	0.6747	0.3845	35	1.53	2%	0
050.99	Soluble Potassium as K2O, Other (30%)	0177	31.90	0.3895	30.41	0.6747	0.3845	35	2.21	2%	0
050.99	Soluble Potassium as K2O, Other (30%)	0451	32.53	1.120	30.41	0.6747	0.3845	35	3.14	3%	0
050.99	Soluble Potassium as K2O, Other (30%)	0516	30.19	4.729	30.41	0.6747	0.3845	35	-0.33	0%	1
060.00	Water (Free), Vacuum Oven (%)	0007	0.6000	0.0600				2			0
060.00	Water (Free), Vacuum Oven (%)	0096	0.7550	0.1300				2			0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 h... (%)	0055	1.150	0.3000				1			0
060.99	Water (Free), Other (%)	0055	0.6400	0.2800	1.214	0.5529	0.0612	5	-1.04	24%	0
060.99	Water (Free), Other (%)	0513	0.9350	0.0100	1.214	0.5529	0.0612	5	-0.50	11%	0
060.99	Water (Free), Other (%)	0518	1.075	0.0100	1.214	0.5529	0.0612	5	-0.25	6%	0
060.99	Water (Free), Other (%)	0510	1.321	0.0062	1.214	0.5529	0.0612	5	0.19	4%	0
060.99	Water (Free), Other (%)	0009	2.100	0.0000	1.214	0.5529	0.0612	5	1.60	36%	0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (1%)	0040	0.3450	0.0100	0.3687	0.0239	0.0168	4	-0.99	3%	0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (1%)	0029	0.3598	0.0205	0.3687	0.0239	0.0168	4	-0.37	1%	0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (1%)	0485	0.3685	0.0237	0.3687	0.0239	0.0168	4	-0.01	0%	0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (1%)	0157	0.4015	0.0130	0.3687	0.0239	0.0168	4	1.37	4%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0472	0.2700	0.0400	0.3700	0.0582	0.0131	15	-1.72	14%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0354	0.3110	0.0300	0.3700	0.0582	0.0131	15	-1.01	8%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0035	0.3270	0.0040	0.3700	0.0582	0.0131	15	-0.74	6%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0255	0.3360	0.0140	0.3700	0.0582	0.0131	15	-0.58	5%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0482	0.3450	0.0100	0.3700	0.0582	0.0131	15	-0.43	3%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0360	0.3535	0.0070	0.3700	0.0582	0.0131	15	-0.28	2%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0096	0.3600	0.0000	0.3700	0.0582	0.0131	15	-0.17	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0444	0.3700	0.0000	0.3700	0.0582	0.0131	15	0.00	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0451	0.3710	0.0180	0.3700	0.0582	0.0131	15	0.02	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0433	0.3715	0.0070	0.3700	0.0582	0.0131	15	0.03	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0157	0.3775	0.0210	0.3700	0.0582	0.0131	15	0.13	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0102	0.3797	0.0029	0.3700	0.0582	0.0131	15	0.17	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0136	0.4500	0.0000	0.3700	0.0582	0.0131	15	1.37	11%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0483	0.6010	0.0020	0.3700	0.0582	0.0131	15	3.97	31%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0231	0.6600	0.0400	0.3700	0.0582	0.0131	15	4.98	39%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0324	0.4825	0.1230	0.3700	0.0582	0.0131	15	1.93	15%	1
101.32	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0521	0.3380	0.0000	0.3875	0.0486	0.0212	5	-1.02	6%	0
101.32	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0300	0.3640	0.0071	0.3875	0.0486	0.0212	5	-0.48	3%	0
101.32	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0541	0.3800	0.0600	0.3875	0.0486	0.0212	5	-0.15	1%	0
101.32	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0423	0.3880	0.0040	0.3875	0.0486	0.0212	5	0.01	0%	0
101.32	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0394	0.4675	0.0350	0.3875	0.0486	0.0212	5	1.65	10%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0106	0.2308	0.0391	0.3531	0.0238	0.0139	10	-4.77	17%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0086	0.3312	0.0069	0.3531	0.0238	0.0139	10	-0.85	3%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0177	0.3443	0.0117	0.3531	0.0238	0.0139	10	-0.34	1%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0072	0.3460	0.0200	0.3531	0.0238	0.0139	10	-0.28	1%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0117	0.3513	0.0030	0.3531	0.0238	0.0139	10	-0.07	0%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0397	0.3543	0.0058	0.3531	0.0238	0.0139	10	0.05	0%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0055	0.3550	0.0100	0.3531	0.0238	0.0139	10	0.08	0%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0034	0.3620	0.0080	0.3531	0.0238	0.0139	10	0.35	1%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0527	0.3805	0.0090	0.3531	0.0238	0.0139	10	1.07	4%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006... (1%)	0037	0.4035	0.0250	0.3531	0.0238	0.0139	10	1.97	7%	0
101.70	Acid Soluble Calcium, Titrimetric (1%)	0529	0.5000	0.0000	0.9382	0.2996	0.0800	4	-1.46	23%	0
101.70	Acid Soluble Calcium, Titrimetric (1%)	0476	1.008	0.2393	0.9382	0.2996	0.0800	4	0.23	4%	0
101.70	Acid Soluble Calcium, Titrimetric (1%)	0510	1.075	0.0007	0.9382	0.2996	0.0800	4	0.46	7%	0
101.70	Acid Soluble Calcium, Titrimetric (1%)	0544	1.170	0.0800	0.9382	0.2996	0.0800	4	0.77	12%	0
101.99	Acid Soluble Calcium, Other (1%)	0389	0.3450	0.0100	0.4800	0.1950	0.0242	6	-0.62	14%	0
101.99	Acid Soluble Calcium, Other (1%)	0368	0.3480	0.0538	0.4800	0.1950	0.0242	6	-0.60	14%	0
101.99	Acid Soluble Calcium, Other (1%)	0027	0.3785	0.0430	0.4800	0.1950	0.0242	6	-0.46	11%	0
101.99	Acid Soluble Calcium, Other (1%)	0390	0.4362	0.0363	0.4800	0.1950	0.0242	6	-0.20	5%	0
101.99	Acid Soluble Calcium, Other (1%)	0523	0.6000	0.0000	0.4800	0.1950	0.0242	6	0.55	12%	0
101.99	Acid Soluble Calcium, Other (1%)	0519	1.076	0.0020	0.4800	0.1950	0.0242	6	2.72	62%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0513	1.025	0.0300	1.208	0.1543	0.0502	8	-1.09	8%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0157	1.085	0.0100	1.208	0.1543	0.0502	8	-0.73	5%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0516	1.160	0.0746	1.208	0.1543	0.0502	8	-0.28	2%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0485	1.193	0.1280	1.208	0.1543	0.0502	8	-0.09	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0029	1.199	0.0790	1.208	0.1543	0.0502	8	-0.06	0%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0534	1.200	0.0400	1.208	0.1543	0.0502	8	-0.05	0%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0169	1.365	0.0300	1.208	0.1543	0.0502	8	0.93	6%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0309	1.855	0.0100	1.208	0.1543	0.0502	8	3.83	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				
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0291	1.025	0.0100	1.186	0.1084	0.0280	18	-1.49	7%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0255	1.059	0.0640	1.186	0.1084	0.0280	18	-1.17	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0324	1.090	0.0200	1.186	0.1084	0.0280	18	-0.89	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0035	1.105	0.0300	1.186	0.1084	0.0280	18	-0.75	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0360	1.110	0.0200	1.186	0.1084	0.0280	18	-0.70	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0096	1.145	0.0300	1.186	0.1084	0.0280	18	-0.38	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0482	1.145	0.0300	1.186	0.1084	0.0280	18	-0.38	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0157	1.165	0.0100	1.186	0.1084	0.0280	18	-0.20	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0231	1.175	0.0300	1.186	0.1084	0.0280	18	-0.10	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0444	1.180	0.0200	1.186	0.1084	0.0280	18	-0.06	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0354	1.198	0.0190	1.186	0.1084	0.0280	18	0.10	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0234	1.200	0.0600	1.186	0.1084	0.0280	18	0.13	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0371	1.200	0.0000	1.186	0.1084	0.0280	18	0.13	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0102	1.233	0.0412	1.186	0.1084	0.0280	18	0.43	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0483	1.305	0.0500	1.186	0.1084	0.0280	18	1.10	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0390	1.331	0.0410	1.186	0.1084	0.0280	18	1.33	6%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0433	1.339	0.0180	1.186	0.1084	0.0280	18	1.41	6%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0472	1.405	0.0100	1.186	0.1084	0.0280	18	2.02	9%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0394	1.065	0.0100	1.155	0.0837	0.0183	6	-0.95	4%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0521	1.113	0.0000	1.155	0.0837	0.0183	6	-0.44	2%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0300	1.140	0.0200	1.155	0.0837	0.0183	6	-0.16	1%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0423	1.140	0.0200	1.155	0.0837	0.0183	6	-0.16	1%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0072	1.190	0.0000	1.155	0.0837	0.0183	6	0.38	2%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0541	1.530	0.0600	1.155	0.0837	0.0183	6	4.00	16%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0106	1.060	0.0130	1.169	0.0635	0.0257	11	-1.71	5%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0486	1.090	0.0200	1.169	0.0635	0.0257	11	-1.24	3%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0086	1.120	0.0014	1.169	0.0635	0.0257	11	-0.77	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0117	1.155	0.0040	1.169	0.0635	0.0257	11	-0.22	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0034	1.162	0.0170	1.169	0.0635	0.0257	11	-0.11	0%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0397	1.162	0.0293	1.169	0.0635	0.0257	11	-0.11	0%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0177	1.203	0.0564	1.169	0.0635	0.0257	11	0.54	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0037	1.205	0.0240	1.169	0.0635	0.0257	11	0.57	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0527	1.221	0.0280	1.169	0.0635	0.0257	11	0.82	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0055	1.230	0.0200	1.169	0.0635	0.0257	11	0.97	3%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0136	1.235	0.0700	1.169	0.0635	0.0257	11	1.05	3%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0515	1.268	0.1345	1.169	0.0635	0.0257	11	1.57	4%	1
121.70	Acid Soluble Magnesium, Titrimetric (EDTA) (1.2%)	0529	1.650	0.1000				1			0
121.99	Acid Soluble Magnesium, Other (1.2%)	0476	0.8615*	0.0230	1.198	0.0777	0.0291	9	-4.00	14%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0523	1.150	0.1000	1.198	0.0777	0.0291	9	-0.57	2%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0506	1.160	0.0200	1.198	0.0777	0.0291	9	-0.45	2%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0389	1.185	0.0100	1.198	0.0777	0.0291	9	-0.16	1%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0368	1.191	0.0404	1.198	0.0777	0.0291	9	-0.09	0%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0501	1.200	0.0000	1.198	0.0777	0.0291	9	0.02	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
121.99	Acid Soluble Magnesium, Other (1.2%)	0027	1.227	0.0170	1.198	0.0777	0.0291	9	0.34	1%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0519	1.275	0.0500	1.198	0.0777	0.0291	9	0.91	3%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0515	1.387	0.0014	1.198	0.0777	0.0291	9	2.24	8%	0
131.00	Water Soluble Magnesium, AA (%)	0029	0.9970	0.0661				2			0
131.00	Water Soluble Magnesium, AA (%)	0309	1.125	0.0100				2			0
131.30	Water Soluble Magnesium, ICP (%)	0444	0.9850	0.0300				1			0
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0476	0.5654	0.0366	1.008	0.3840	0.0791	3	-1.15	22%	0
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0518	1.200	0.2000	1.008	0.3840	0.0791	3	0.50	10%	0
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0510	1.257	0.0007	1.008	0.3840	0.0791	3	0.65	12%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0405	1.025	0.1302				2			0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0106	1.680	0.4800				2			0
143.99	Elemental Sulfur, Other (%)	0255	4.991	0.3300	5.622	0.5777	0.1133	3	-1.09	6%	0
143.99	Elemental Sulfur, Other (%)	0472	5.750	0.0000	5.622	0.5777	0.1133	3	0.22	1%	0
143.99	Elemental Sulfur, Other (%)	0389	6.125	0.0100	5.622	0.5777	0.1133	3	0.87	4%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0106	4.050	0.0400	4.189	0.2017	0.0862	6	-0.61	2%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0405	4.065	0.0100	4.189	0.2017	0.0862	6	-0.55	1%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0522	4.075	0.0100	4.189	0.2017	0.0862	6	-0.50	1%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0444	4.125	0.2100	4.189	0.2017	0.0862	6	-0.28	1%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0397	4.336	0.0072	4.189	0.2017	0.0862	6	0.65	2%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0027	4.480	0.2400	4.189	0.2017	0.0862	6	1.29	3%	0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0444	3.735	0.1700				2			0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0518	5.300	0.2000				2			0
148.00	Total Sulfur, Combustion (5%)	0451	5.674	0.0240	5.940	0.2083	0.1818	5	-1.28	2%	0
148.00	Total Sulfur, Combustion (5%)	0136	5.820	0.0800	5.940	0.2083	0.1818	5	-0.58	1%	0
148.00	Total Sulfur, Combustion (5%)	0157	5.915	0.2500	5.940	0.2083	0.1818	5	-0.12	0%	0
148.00	Total Sulfur, Combustion (5%)	0025	6.110	0.2530	5.940	0.2083	0.1818	5	0.81	1%	0
148.00	Total Sulfur, Combustion (5%)	0029	6.183	0.3020	5.940	0.2083	0.1818	5	1.17	2%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0513	4.095*	0.0900	5.168	1.069	0.1293	9	-0.93	10%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0476	4.103*	0.0641	5.168	1.069	0.1293	9	-0.92	10%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0324	4.265*	0.2900	5.168	1.069	0.1293	9	-0.78	9%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0444	4.525*	0.1500	5.168	1.069	0.1293	9	-0.56	6%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0405	5.090	0.1400	5.168	1.069	0.1293	9	-0.07	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0055	5.985	0.0700	5.168	1.069	0.1293	9	0.71	8%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0534	6.055	0.1100	5.168	1.069	0.1293	9	0.77	9%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0040	6.100	0.2000	5.168	1.069	0.1293	9	0.80	9%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0157	6.295	0.0500	5.168	1.069	0.1293	9	0.97	11%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (5%)	0114	4.660*	0.7800	5.168	1.069	0.1293	9	-0.44	5%	1
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0541	3.695*	0.0100	5.275	1.154	0.0692	11	-1.28	15%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0394	3.775*	0.0700	5.275	1.154	0.0692	11	-1.22	14%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0444	3.990*	0.0200	5.275	1.154	0.0692	11	-1.04	12%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0515	4.937*	0.2278	5.275	1.154	0.0692	11	-0.27	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0486	5.400	0.0000	5.275	1.154	0.0692	11	0.10	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0102	5.548	0.0532	5.275	1.154	0.0692	11	0.22	3%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0117	6.016	0.0040	5.275	1.154	0.0692	11	0.60	7%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0037	6.093	0.0590	5.275	1.154	0.0692	11	0.66	8%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0483	6.110	0.1800	5.275	1.154	0.0692	11	0.68	8%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0177	6.138	0.0109	5.275	1.154	0.0692	11	0.70	8%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (5%)	0527	6.322	0.1260	5.275	1.154	0.0692	11	0.85	10%	0
148.99	Total Sulfur, Other (5%)	0096	4.370*	0.1400	5.616	0.6252	0.2017	12	-1.99	11%	0
148.99	Total Sulfur, Other (5%)	0354	4.473*	0.0580	5.616	0.6252	0.2017	12	-1.83	10%	0
148.99	Total Sulfur, Other (5%)	0519	5.080	0.0400	5.616	0.6252	0.2017	12	-0.86	5%	0
148.99	Total Sulfur, Other (5%)	0501	5.450	0.5000	5.616	0.6252	0.2017	12	-0.27	1%	0
148.99	Total Sulfur, Other (5%)	0433	5.509	0.0210	5.616	0.6252	0.2017	12	-0.17	1%	0
148.99	Total Sulfur, Other (5%)	0368	5.840	0.5299	5.616	0.6252	0.2017	12	0.36	2%	0
148.99	Total Sulfur, Other (5%)	0086	5.858	0.0632	5.616	0.6252	0.2017	12	0.39	2%	0
148.99	Total Sulfur, Other (5%)	0523	5.915	0.2700	5.616	0.6252	0.2017	12	0.48	3%	0
148.99	Total Sulfur, Other (5%)	0300	5.929	0.0380	5.616	0.6252	0.2017	12	0.50	3%	0
148.99	Total Sulfur, Other (5%)	0506	5.990	0.1600	5.616	0.6252	0.2017	12	0.60	3%	0
148.99	Total Sulfur, Other (5%)	0482	6.065	0.3700	5.616	0.6252	0.2017	12	0.72	4%	0
148.99	Total Sulfur, Other (5%)	0072	6.405	0.2300	5.616	0.6252	0.2017	12	1.26	7%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0521	5.958	0.0000				2			0
149.04	Sulfur - HNO3 soluble, ICP (%)	0423	6.005	0.0300				2			0
151.30	Acid Soluble Arsenic, ICP (ppm)	0501	85.50	9.000	157.3	33.63	3.651	7	-1.93	23%	0
151.30	Acid Soluble Arsenic, ICP (ppm)	0523	141.0	0.2000	157.3	33.63	3.651	7	-0.44	5%	0
151.30	Acid Soluble Arsenic, ICP (ppm)	0444	147.0	2.000	157.3	33.63	3.651	7	-0.28	3%	0
151.30	Acid Soluble Arsenic, ICP (ppm)	0541	155.0	0.0000	157.3	33.63	3.651	7	-0.06	1%	0
151.30	Acid Soluble Arsenic, ICP (ppm)	0255	171.9	2.256	157.3	33.63	3.651	7	0.39	5%	0
151.30	Acid Soluble Arsenic, ICP (ppm)	0096	184.1	5.500	157.3	33.63	3.651	7	0.72	9%	0
151.30	Acid Soluble Arsenic, ICP (ppm)	0394	195.0	6.600	157.3	33.63	3.651	7	1.01	12%	0
151.32	Acid Soluble Arsenic, ICP, 2006.03 (ppm)	0300	206.8	4.300				1			0
151.33	Acid Soluble Arsenic, ICP, 2006.03 modified ... (ppm)	0515	186.0	1.287	206.2	16.51	5.192	5	-1.22	5%	0
151.33	Acid Soluble Arsenic, ICP, 2006.03 modified ... (ppm)	0086	196.2	1.810	206.2	16.51	5.192	5	-0.61	2%	0
151.33	Acid Soluble Arsenic, ICP, 2006.03 modified ... (ppm)	0117	207.4	5.200	206.2	16.51	5.192	5	0.07	0%	0
151.33	Acid Soluble Arsenic, ICP, 2006.03 modified ... (ppm)	0527	211.9	6.585	206.2	16.51	5.192	5	0.34	1%	0
151.33	Acid Soluble Arsenic, ICP, 2006.03 modified ... (ppm)	0037	229.6	11.08	206.2	16.51	5.192	5	1.42	6%	0
151.34	Acid Soluble Arsenic, ICP, EPA 3050B/6010C (ppm)	0515	183.1	3.509				2			0
151.34	Acid Soluble Arsenic, ICP, EPA 3050B/6010C (ppm)	0368	195.5	41.00				2			0
151.99	Acid Soluble Arsenic, Other (ppm)	0519	109.4	1.000				2			0
151.99	Acid Soluble Arsenic, Other (ppm)	0476	158.5	1.280				2			0
165.00	Acid Soluble Boron, Spectrophotometric (0.3%)	0531	0.1350*	0.0100	0.2348	0.0217	0.0113	10	-4.27	21%	0
165.00	Acid Soluble Boron, Spectrophotometric (0.3%)	0169	0.2119	0.0247	0.2348	0.0217	0.0113	10	-0.98	5%	0
165.00	Acid Soluble Boron, Spectrophotometric (0.3%)	0029	0.2255	0.0130	0.2348	0.0217	0.0113	10	-0.40	2%	0
165.00	Acid Soluble Boron, Spectrophotometric (0.3%)	0397	0.2288	0.0010	0.2348	0.0217	0.0113	10	-0.26	1%	0
165.00	Acid Soluble Boron, Spectrophotometric (0.3%)	0535	0.2350	0.0100	0.2348	0.0217	0.0113	10	0.01	0%	0
165.00	Acid Soluble Boron, Spectrophotometric (0.3%)	0539	0.2350	0.0100	0.2348	0.0217	0.0113	10	0.01	0%	0
165.00	Acid Soluble Boron, Spectrophotometric (0.3%)	0055	0.2420	0.0040	0.2348	0.0217	0.0113	10	0.31	2%	0

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165.00	Acid Soluble Boron , Spectrophotometric (0.3%)	0540	0.2450	0.0100	0.2348	0.0217	0.0113	10	0.44	2%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.3%)	0309	0.2550	0.0300	0.2348	0.0217	0.0113	10	0.87	4%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.3%)	0534	0.2700	0.0000	0.2348	0.0217	0.0113	10	1.51	8%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.3%)	0506	0.2300	0.0600	0.2348	0.0217	0.0113	10	-0.20	1%	1
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0072	0.2160	0.0020	0.2485	0.0259	0.0073	11	-1.17	7%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0324	0.2190	0.0040	0.2485	0.0259	0.0073	11	-1.06	6%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0037	0.2300	0.0280	0.2485	0.0259	0.0073	11	-0.67	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0444	0.2300	0.0200	0.2485	0.0259	0.0073	11	-0.67	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0521	0.2449	0.0000	0.2485	0.0259	0.0073	11	-0.13	1%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0136	0.2500	0.0000	0.2485	0.0259	0.0073	11	0.06	0%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0394	0.2543	0.0060	0.2485	0.0259	0.0073	11	0.21	1%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0390	0.2645	0.0109	0.2485	0.0259	0.0073	11	0.58	3%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0354	0.2685	0.0070	0.2485	0.0259	0.0073	11	0.72	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0433	0.2685	0.0010	0.2485	0.0259	0.0073	11	0.72	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.3%)	0086	0.2983	0.0015	0.2485	0.0259	0.0073	11	1.80	10%	0
165.99	Acid Soluble Boron , Other (0.3%)	0476	0.1275*	0.0010	0.2547	0.0318	0.0107	19	-3.99	25%	0
165.99	Acid Soluble Boron , Other (0.3%)	0513	0.2000*	0.0000	0.2547	0.0318	0.0107	19	-1.72	11%	0
165.99	Acid Soluble Boron , Other (0.3%)	0472	0.2200	0.0000	0.2547	0.0318	0.0107	19	-1.09	7%	0
165.99	Acid Soluble Boron , Other (0.3%)	0482	0.2300	0.0000	0.2547	0.0318	0.0107	19	-0.77	5%	0
165.99	Acid Soluble Boron , Other (0.3%)	0423	0.2375	0.0030	0.2547	0.0318	0.0107	19	-0.54	3%	0
165.99	Acid Soluble Boron , Other (0.3%)	0117	0.2380	0.0030	0.2547	0.0318	0.0107	19	-0.52	3%	0
165.99	Acid Soluble Boron , Other (0.3%)	0300	0.2395	0.0006	0.2547	0.0318	0.0107	19	-0.48	3%	0
165.99	Acid Soluble Boron , Other (0.3%)	0368	0.2478	0.0444	0.2547	0.0318	0.0107	19	-0.22	1%	0
165.99	Acid Soluble Boron , Other (0.3%)	0527	0.2495	0.0130	0.2547	0.0318	0.0107	19	-0.16	1%	0
165.99	Acid Soluble Boron , Other (0.3%)	0231	0.2600	0.0000	0.2547	0.0318	0.0107	19	0.17	1%	0
165.99	Acid Soluble Boron , Other (0.3%)	0291	0.2600	0.0000	0.2547	0.0318	0.0107	19	0.17	1%	0
165.99	Acid Soluble Boron , Other (0.3%)	0043	0.2650	0.0100	0.2547	0.0318	0.0107	19	0.32	2%	0
165.99	Acid Soluble Boron , Other (0.3%)	0519	0.2650	0.0100	0.2547	0.0318	0.0107	19	0.32	2%	0
165.99	Acid Soluble Boron , Other (0.3%)	0515	0.2689	0.0362	0.2547	0.0318	0.0107	19	0.45	3%	0
165.99	Acid Soluble Boron , Other (0.3%)	0523	0.2750	0.0100	0.2547	0.0318	0.0107	19	0.64	4%	0
165.99	Acid Soluble Boron , Other (0.3%)	0360	0.2765	0.0030	0.2547	0.0318	0.0107	19	0.69	4%	0
165.99	Acid Soluble Boron , Other (0.3%)	0486	0.2900	0.0200	0.2547	0.0318	0.0107	19	1.11	7%	0
165.99	Acid Soluble Boron , Other (0.3%)	0501	0.3000	0.0000	0.2547	0.0318	0.0107	19	1.42	9%	0
165.99	Acid Soluble Boron , Other (0.3%)	0255	0.3585	0.0490	0.2547	0.0318	0.0107	19	3.26	20%	0
165.99	Acid Soluble Boron , Other (0.3%)	0483	2,800	40.00	0.2547	0.0318	0.0107	19	87906.04	549653%	2
171.10	Water Soluble Boron , Spectrophotometric (%)	0540	0.1005	0.0030	0.1378	0.0380	0.0086	10	-0.91	14%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0537	0.1015	0.0070	0.1378	0.0380	0.0086	10	-0.89	13%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0532	0.1040	0.0020	0.1378	0.0380	0.0086	10	-0.83	12%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0536	0.1050	0.0100	0.1378	0.0380	0.0086	10	-0.80	12%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0533	0.1370	0.0040	0.1378	0.0380	0.0086	10	-0.02	0%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0538	0.1500	0.0200	0.1378	0.0380	0.0086	10	0.30	4%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0539	0.1550	0.0100	0.1378	0.0380	0.0086	10	0.42	6%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0531	0.1650	0.0100	0.1378	0.0380	0.0086	10	0.67	10%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
171.10	Water Soluble Boron , Spectrophotometric (%)	0535	0.1650	0.0100	0.1378	0.0380	0.0086	10	0.67	10%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0486	0.2150	0.0100	0.1378	0.0380	0.0086	10	1.89	28%	0
171.10	Water Soluble Boron , Spectrophotometric (%)	0518	0.4300	0.0400	0.1378	0.0380	0.0086	10	7.16	106%	1
171.99	Water Soluble Boron , Other (%)	0444	0.2350	0.0100				2			0
171.99	Water Soluble Boron , Other (%)	0402	0.2550	0.0100				2			0
181.30	Acid Soluble Cadmium , ICP (ppm)	0501	55.50	5.000	148.8	50.51	4.281	9	-1.70	31%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0523	105.7	1.300	148.8	50.51	4.281	9	-0.79	14%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0444	108.0	2.000	148.8	50.51	4.281	9	-0.74	14%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0255	136.2	6.928	148.8	50.51	4.281	9	-0.23	4%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	164.5	3.000	148.8	50.51	4.281	9	0.29	5%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0096	182.0	1.300	148.8	50.51	4.281	9	0.61	11%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0482	185.5	1.000	148.8	50.51	4.281	9	0.67	12%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0541	189.5	9.000	148.8	50.51	4.281	9	0.74	14%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0394	194.5	9.000	148.8	50.51	4.281	9	0.84	15%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0035	160.0	30.00	148.8	50.51	4.281	9	0.21	4%	1
181.32	Acid Soluble Cadmium , ICP, 2006.03 (ppm)	0300	176.9	4.100				1			0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0086	151.4	7.960	173.0	19.53	5.319	5	-1.11	6%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0515	156.7	1.375	173.0	19.53	5.319	5	-0.83	5%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0117	171.8	0.1000	173.0	19.53	5.319	5	-0.06	0%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0037	188.7	16.67	173.0	19.53	5.319	5	0.80	5%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0527	196.3	0.4920	173.0	19.53	5.319	5	1.20	7%	0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	157.1	4.928				2			0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0368	178.5	23.00				2			0
181.99	Acid Soluble Cadmium , Other (ppm)	0519	120.3	0.1000	148.2	24.75	0.3700	3	-1.13	9%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0476	156.7	0.0100	148.2	24.75	0.3700	3	0.35	3%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0506	167.5	1.000	148.2	24.75	0.3700	3	0.78	7%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0501	210.5	15.00	349.0	79.62	15.14	9	-1.61	20%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0444	276.5	9.000	349.0	79.62	15.14	9	-0.84	10%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0523	301.5	3.200	349.0	79.62	15.14	9	-0.55	7%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0394	339.0	8.000	349.0	79.62	15.14	9	-0.12	1%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	350.5	3.000	349.0	79.62	15.14	9	0.02	0%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	373.0	38.00	349.0	79.62	15.14	9	0.28	3%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	411.5	7.000	349.0	79.62	15.14	9	0.72	9%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0541	423.0	36.00	349.0	79.62	15.14	9	0.86	11%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	436.2	17.10	349.0	79.62	15.14	9	1.01	12%	0
191.32	Acid Soluble Chromium , ICP, 2006.03 (ppm)	0300	421.2	3.800				1			0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0086	375.0	8.890	415.3	28.54	5.936	5	-1.41	5%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0515	406.2	4.982	415.3	28.54	5.936	5	-0.32	1%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0117	412.0	2.200	415.3	28.54	5.936	5	-0.12	0%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0527	433.4	7.020	415.3	28.54	5.936	5	0.63	2%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0037	450.1	6.588	415.3	28.54	5.936	5	1.22	4%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	0515	392.6	3.798				2			0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	0368	410.0	88.00				2			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
191.99	Acid Soluble Chromium , Other (ppm)	0476	290.3	18.59	303.8	22.72	11.19	3	-0.59	2%	0
191.99	Acid Soluble Chromium , Other (ppm)	0519	291.0	0.9700	303.8	22.72	11.19	3	-0.56	2%	0
191.99	Acid Soluble Chromium , Other (ppm)	0506	330.0	14.00	303.8	22.72	11.19	3	1.15	4%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0523	186.4	8.400	271.5	57.55	9.200	5	-1.48	16%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	240.0	6.000	271.5	57.55	9.200	5	-0.55	6%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0035	296.0	20.00	271.5	57.55	9.200	5	0.43	5%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	308.0	10.00	271.5	57.55	9.200	5	0.63	7%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	327.0	1.600	271.5	57.55	9.200	5	0.96	10%	0
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	0423	283.0	2.000				2			0
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	0300	312.6	3.200				2			0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0086	276.4	5.390	310.0	26.39	5.820	5	-1.27	5%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0515	289.4	3.243	310.0	26.39	5.820	5	-0.78	3%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0117	320.1	5.200	310.0	26.39	5.820	5	0.38	2%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0527	323.3	8.450	310.0	26.39	5.820	5	0.50	2%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0037	340.9	6.818	310.0	26.39	5.820	5	1.17	5%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0501	153.5	7.000	251.4	85.25	25.82	3	-1.15	19%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	291.1	7.448	251.4	85.25	25.82	3	0.47	8%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0368	309.5	63.00	251.4	85.25	25.82	3	0.68	12%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0476	242.6	3.120	278.9	35.43	9.350	4	-1.03	7%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0255	254.4	17.47	278.9	35.43	9.350	4	-0.69	4%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0506	309.0	16.00	278.9	35.43	9.350	4	0.85	5%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0519	309.6	0.8100	278.9	35.43	9.350	4	0.87	6%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.1%)	0029	0.0248	0.0017	0.0351	0.0131	0.0018	4	-0.79	15%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.1%)	0040	0.0290	0.0005	0.0351	0.0131	0.0018	4	-0.47	9%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.1%)	0485	0.0325	0.0029	0.0351	0.0131	0.0018	4	-0.20	4%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.1%)	0531	0.0542	0.0019	0.0351	0.0131	0.0018	4	1.46	27%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0255	0.01850*	0.0010	0.0263	0.0039	0.0010	16	-2.00	15%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0433	0.0215	0.0010	0.0263	0.0039	0.0010	16	-1.23	9%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0035	0.0226	0.0004	0.0263	0.0039	0.0010	16	-0.94	7%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0324	0.0229	0.0007	0.0263	0.0039	0.0010	16	-0.88	6%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0360	0.0233	0.0006	0.0263	0.0039	0.0010	16	-0.76	6%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0541	0.0241	0.0032	0.0263	0.0039	0.0010	16	-0.56	4%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0157	0.0260	0.0040	0.0263	0.0039	0.0010	16	-0.07	0%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0444	0.0260	0.0020	0.0263	0.0039	0.0010	16	-0.07	0%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0102	0.0265	0.0000	0.0263	0.0039	0.0010	16	0.06	0%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0096	0.0279	0.0008	0.0263	0.0039	0.0010	16	0.42	3%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0354	0.0290	0.0020	0.0263	0.0039	0.0010	16	0.71	5%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0136	0.0300	0.0000	0.0263	0.0039	0.0010	16	0.96	7%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0231	0.0300	0.0000	0.0263	0.0039	0.0010	16	0.96	7%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0402	0.0300	0.0000	0.0263	0.0039	0.0010	16	0.96	7%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0472	0.0300	0.0000	0.0263	0.0039	0.0010	16	0.96	7%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0482	0.0300	0.0000	0.0263	0.0039	0.0010	16	0.96	7%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (0.1%)	0483	273.5	19.00	0.0263	0.0039	0.0010	16	70562.56	520656%	2

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				
221.32	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0521	0.0231	0.0000	128.8	257.5	7.500	4	-0.50	50%	0
221.32	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0300	0.0242	0.0001	128.8	257.5	7.500	4	-0.50	50%	0
221.32	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0394	0.0261	0.0002	128.8	257.5	7.500	4	-0.50	50%	0
221.32	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0423	515.0	30.00	128.8	257.5	7.500	4	1.50	150%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0515	0.0224	0.0013	0.0251	0.0011	0.0010	8	-2.40	6%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0177	0.0246	0.0012	0.0251	0.0011	0.0010	8	-0.45	1%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0086	0.0249	0.0013	0.0251	0.0011	0.0010	8	-0.24	1%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0117	0.0249	0.0035	0.0251	0.0011	0.0010	8	-0.24	1%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0527	0.0250	0.0000	0.0251	0.0011	0.0010	8	-0.11	0%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0106	0.0255	0.0003	0.0251	0.0011	0.0010	8	0.28	1%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0055	0.0260	0.0000	0.0251	0.0011	0.0010	8	0.76	2%	0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (0.1%)	0486	0.0300	0.0000	0.0251	0.0011	0.0010	8	4.21	10%	0
221.99	Acid Soluble Copper , Other (0.1%)	0476	0.01800*	0.0000	0.0272	0.0039	0.0059	8	-2.14	17%	0
221.99	Acid Soluble Copper , Other (0.1%)	0389	0.0250	0.0020	0.0272	0.0039	0.0059	8	-0.51	4%	0
221.99	Acid Soluble Copper , Other (0.1%)	0523	0.0250	0.0100	0.0272	0.0039	0.0059	8	-0.51	4%	0
221.99	Acid Soluble Copper , Other (0.1%)	0368	0.0274	0.0034	0.0272	0.0039	0.0059	8	0.05	0%	0
221.99	Acid Soluble Copper , Other (0.1%)	0027	0.0280	0.0020	0.0272	0.0039	0.0059	8	0.19	2%	0
221.99	Acid Soluble Copper , Other (0.1%)	0390	0.0283	0.0014	0.0272	0.0039	0.0059	8	0.26	2%	0
221.99	Acid Soluble Copper , Other (0.1%)	0515	0.0294	0.0087	0.0272	0.0039	0.0059	8	0.51	4%	0
221.99	Acid Soluble Copper , Other (0.1%)	0519	0.1000	0.0200	0.0272	0.0039	0.0059	8	16.97	134%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.5%)	0513	0.4300*	0.0200	0.5078	0.0683	0.0149	7	-1.03	8%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.5%)	0534	0.4500*	0.0200	0.5078	0.0683	0.0149	7	-0.77	6%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.5%)	0356	0.4930	0.0100	0.5078	0.0683	0.0149	7	-0.20	1%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.5%)	0516	0.4997	0.0054	0.5078	0.0683	0.0149	7	-0.11	1%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.5%)	0531	0.5143	0.0049	0.5078	0.0683	0.0149	7	0.09	1%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.5%)	0029	0.5678	0.0156	0.5078	0.0683	0.0149	7	0.80	6%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.5%)	0485	0.5996	0.0283	0.5078	0.0683	0.0149	7	1.22	9%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0255	0.4950	0.0200	0.5671	0.0452	0.0149	17	-1.60	6%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0402	0.5050	0.0100	0.5671	0.0452	0.0149	17	-1.37	5%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0433	0.5250	0.0040	0.5671	0.0452	0.0149	17	-0.93	4%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0472	0.5300	0.0000	0.5671	0.0452	0.0149	17	-0.82	3%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0102	0.5455	0.0124	0.5671	0.0452	0.0149	17	-0.48	2%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0035	0.5480	0.0120	0.5671	0.0452	0.0149	17	-0.42	2%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0324	0.5570	0.0220	0.5671	0.0452	0.0149	17	-0.22	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0371	0.5600	0.0000	0.5671	0.0452	0.0149	17	-0.16	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0096	0.5650	0.0100	0.5671	0.0452	0.0149	17	-0.05	0%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0444	0.5650	0.0100	0.5671	0.0452	0.0149	17	-0.05	0%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0354	0.5825	0.0230	0.5671	0.0452	0.0149	17	0.34	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0157	0.5855	0.0550	0.5671	0.0452	0.0149	17	0.41	2%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0482	0.6000	0.0200	0.5671	0.0452	0.0149	17	0.73	3%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0231	0.6050	0.0300	0.5671	0.0452	0.0149	17	0.84	3%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0360	0.6065	0.0030	0.5671	0.0452	0.0149	17	0.87	3%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0390	0.6270	0.0021	0.5671	0.0452	0.0149	17	1.32	5%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0234	0.6400	0.0200	0.5671	0.0452	0.0149	17	1.61	6%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.5%)	0483	6,255	10.00	0.5671	0.0452	0.0149	17	138308.01	551411%	2
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0300	0.4963	0.0005	0.5701	0.1077	0.0161	4	-0.69	6%	0
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0521	0.5213	0.0000	0.5701	0.1077	0.0161	4	-0.45	4%	0
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0423	0.5330	0.0240	0.5701	0.1077	0.0161	4	-0.34	3%	0
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0541	0.7300	0.0400	0.5701	0.1077	0.0161	4	1.48	14%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0515	0.5144	0.0080	0.5583	0.0327	0.0097	11	-1.34	4%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0397	0.5280	0.0190	0.5583	0.0327	0.0097	11	-0.93	3%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0486	0.5350	0.0100	0.5583	0.0327	0.0097	11	-0.71	2%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0086	0.5370	0.0085	0.5583	0.0327	0.0097	11	-0.65	2%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0117	0.5540	0.0069	0.5583	0.0327	0.0097	11	-0.13	0%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0527	0.5545	0.0230	0.5583	0.0327	0.0097	11	-0.12	0%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0034	0.5645	0.0030	0.5583	0.0327	0.0097	11	0.19	1%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0055	0.5750	0.0100	0.5583	0.0327	0.0097	11	0.51	1%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0177	0.5762	0.0095	0.5583	0.0327	0.0097	11	0.55	2%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0037	0.5955	0.0090	0.5583	0.0327	0.0097	11	1.14	3%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0136	0.6100	0.0000	0.5583	0.0327	0.0097	11	1.58	5%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.5%)	0106	0.5510	0.0550	0.5583	0.0327	0.0097	11	-0.22	1%	1
241.99	Acid Soluble Iron, Other (0.5%)	0476	0.3730*	0.0080	0.5260	0.0674	0.0236	9	-2.10	15%	0
241.99	Acid Soluble Iron, Other (0.5%)	0519	0.4350*	0.0100	0.5260	0.0674	0.0236	9	-1.25	9%	0
241.99	Acid Soluble Iron, Other (0.5%)	0501	0.5150	0.0700	0.5260	0.0674	0.0236	9	-0.15	1%	0
241.99	Acid Soluble Iron, Other (0.5%)	0506	0.5300	0.0000	0.5260	0.0674	0.0236	9	0.05	0%	0
241.99	Acid Soluble Iron, Other (0.5%)	0515	0.5455	0.0238	0.5260	0.0674	0.0236	9	0.27	2%	0
241.99	Acid Soluble Iron, Other (0.5%)	0027	0.5560	0.0200	0.5260	0.0674	0.0236	9	0.41	3%	0
241.99	Acid Soluble Iron, Other (0.5%)	0523	0.5600	0.0400	0.5260	0.0674	0.0236	9	0.47	3%	0
241.99	Acid Soluble Iron, Other (0.5%)	0389	0.5680	0.0120	0.5260	0.0674	0.0236	9	0.57	4%	0
241.99	Acid Soluble Iron, Other (0.5%)	0368	0.5997	0.0290	0.5260	0.0674	0.0236	9	1.01	7%	0
251.30	Acid Soluble Lead , ICP (ppm)	0501	381.5	13.00	757.4	223.9	33.03	10	-1.56	25%	0
251.30	Acid Soluble Lead , ICP (ppm)	0523	549.8	23.20	757.4	223.9	33.03	10	-0.86	14%	0
251.30	Acid Soluble Lead , ICP (ppm)	0444	561.0	26.00	757.4	223.9	33.03	10	-0.82	13%	0
251.30	Acid Soluble Lead , ICP (ppm)	0482	686.5	29.00	757.4	223.9	33.03	10	-0.29	5%	0
251.30	Acid Soluble Lead , ICP (ppm)	0394	735.5	27.00	757.4	223.9	33.03	10	-0.09	1%	0
251.30	Acid Soluble Lead , ICP (ppm)	0035	842.5	71.00	757.4	223.9	33.03	10	0.35	6%	0
251.30	Acid Soluble Lead , ICP (ppm)	0255	907.9	5.076	757.4	223.9	33.03	10	0.63	10%	0
251.30	Acid Soluble Lead , ICP (ppm)	0096	925.9	2.000	757.4	223.9	33.03	10	0.70	11%	0
251.30	Acid Soluble Lead , ICP (ppm)	0541	950.0	116.0	757.4	223.9	33.03	10	0.80	13%	0
251.30	Acid Soluble Lead , ICP (ppm)	0389	993.0	18.00	757.4	223.9	33.03	10	0.98	16%	0
251.32	Acid Soluble Lead , ICP, 2006.03 (ppm)	0300	906.9	24.10				1			0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0086	825.1	30.99	957.6	112.6	38.07	5	-1.18	7%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0527	899.5	12.19	957.6	112.6	38.07	5	-0.52	3%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0117	917.5	5.600	957.6	112.6	38.07	5	-0.36	2%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0037	1,046	19.92	957.6	112.6	38.07	5	0.78	5%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0515	1,100	121.7	957.6	112.6	38.07	5	1.27	7%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0368	963.0	14.00				2			0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	1,090	29.02				2			0
251.99	Acid Soluble Lead , Other (ppm)	0519	569.7	0.6600	760.8	206.9	6.107	3	-0.92	13%	0
251.99	Acid Soluble Lead , Other (ppm)	0476	732.1	2.660	760.8	206.9	6.107	3	-0.14	2%	0
251.99	Acid Soluble Lead , Other (ppm)	0506	980.5	15.00	760.8	206.9	6.107	3	1.06	14%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.09... (0.3%)	0029	0.0242	0.0032	0.0272	0.0025	0.0040	4	-1.18	5%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.09... (0.3%)	0040	0.0265	0.0050	0.0272	0.0025	0.0040	4	-0.26	1%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.09... (0.3%)	0531	0.0277	0.0020	0.0272	0.0025	0.0040	4	0.21	1%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.09... (0.3%)	0485	0.0303	0.0059	0.0272	0.0025	0.0040	4	1.23	6%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0472	0.0200	0.0000	0.0258	0.0044	0.0006	9	-1.21	11%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0433	0.0230	0.0000	0.0258	0.0044	0.0006	9	-0.59	5%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0035	0.0242	0.0010	0.0258	0.0044	0.0006	9	-0.34	3%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0354	0.0245	0.0010	0.0258	0.0044	0.0006	9	-0.27	3%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0157	0.0250	0.0000	0.0258	0.0044	0.0006	9	-0.17	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0096	0.0256	0.0007	0.0258	0.0044	0.0006	9	-0.06	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0102	0.0263	0.0009	0.0258	0.0044	0.0006	9	0.09	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0390	0.0314	0.0018	0.0258	0.0044	0.0006	9	1.16	11%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0291	0.1100	0.0000	0.0258	0.0044	0.0006	9	17.50	163%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0324	0.0246	0.0027	0.0269	0.0028	0.0013	3	-0.83	4%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0360	0.0261	0.0012	0.0269	0.0028	0.0013	3	-0.28	1%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (0.3%)	0482	0.0300	0.0000	0.0269	0.0028	0.0013	3	1.11	6%	0
261.32	Acid Soluble Manganese , ICP, test portion in... (0.3%)	0541	0.0248	0.0016	32.75	73.09	2.656	5	-0.45	50%	0
261.32	Acid Soluble Manganese , ICP, test portion in... (0.3%)	0444	0.0260	0.0000	32.75	73.09	2.656	5	-0.45	50%	0
261.32	Acid Soluble Manganese , ICP, test portion in... (0.3%)	0402	0.0350	0.0100	32.75	73.09	2.656	5	-0.45	50%	0
261.32	Acid Soluble Manganese , ICP, test portion in... (0.3%)	0231	0.1650	0.2700	32.75	73.09	2.656	5	-0.45	50%	0
261.32	Acid Soluble Manganese , ICP, test portion in... (0.3%)	0483	163.5	13.00	32.75	73.09	2.656	5	1.79	200%	0
261.33	Acid Soluble Manganese , ICP, test portion or... (0.3%)	0086	0.0263	0.0011				1			0
261.34	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0521	0.0228	0.0000	0.0253	0.0021	0.0006	4	-1.20	5%	0
261.34	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0394	0.0245	0.0010	0.0253	0.0021	0.0006	4	-0.39	2%	0
261.34	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0300	0.0264	0.0002	0.0253	0.0021	0.0006	4	0.53	2%	0
261.34	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0423	0.0275	0.0010	0.0253	0.0021	0.0006	4	1.06	4%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0515	0.01420*	0.0186	0.0260	0.0047	0.0082	8	-2.30	23%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0106	0.0232	0.0011	0.0260	0.0047	0.0082	8	-0.56	6%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0136	0.0250	0.0100	0.0260	0.0047	0.0082	8	-0.20	2%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0177	0.0251	0.0024	0.0260	0.0047	0.0082	8	-0.18	2%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0117	0.0265	0.0004	0.0260	0.0047	0.0082	8	0.09	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0527	0.0265	0.0030	0.0260	0.0047	0.0082	8	0.09	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0486	0.0300	0.0000	0.0260	0.0047	0.0082	8	0.77	8%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.3%)	0055	0.2750	0.0300	0.0260	0.0047	0.0082	8	48.34	478%	0
261.99	Acid Soluble Manganese , Other (0.3%)	0476	0.0200	0.0000	0.0253	0.0035	0.0028	8	-1.40	11%	0
261.99	Acid Soluble Manganese , Other (0.3%)	0255	0.0230	0.0020	0.0253	0.0035	0.0028	8	-0.61	5%	0
261.99	Acid Soluble Manganese , Other (0.3%)	0389	0.0245	0.0010	0.0253	0.0035	0.0028	8	-0.22	2%	0
261.99	Acid Soluble Manganese , Other (0.3%)	0523	0.0250	0.0100	0.0253	0.0035	0.0028	8	-0.09	1%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
261.99	Acid Soluble Manganese , Other (0.3%)	0515	0.0253	0.0060	0.0253	0.0035	0.0028	8	-0.01	0%	0
261.99	Acid Soluble Manganese , Other (0.3%)	0368	0.0268	0.0027	0.0253	0.0035	0.0028	8	0.37	3%	0
261.99	Acid Soluble Manganese , Other (0.3%)	0027	0.0275	0.0010	0.0253	0.0035	0.0028	8	0.57	4%	0
261.99	Acid Soluble Manganese , Other (0.3%)	0519	0.2700	0.0000	0.0253	0.0035	0.0028	8	64.20	483%	0
271.00	Water Soluble Manganese , AA (%)	0027	0.0140	0.0020				1			0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0444	0.0130	0.0000				2			0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0486	0.0135	0.0010				2			0
281.00	Acid Soluble Mercury , AA (ppm)	0117	25.59	2.690				1			0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0085	0.0010	15.94	16.90	0.9650	4	-0.94	50%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0541	2.975	0.4500	15.94	16.90	0.9650	4	-0.77	41%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0394	27.45	2.210	15.94	16.90	0.9650	4	0.68	36%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0527	33.32	1.199	15.94	16.90	0.9650	4	1.03	55%	0
281.99	Acid Soluble Mercury , Other (ppm)	0519	8.780	0.0400				2			0
281.99	Acid Soluble Mercury , Other (ppm)	0476	29.11	0.7400				2			0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0519	249.0*	2.000	594.6	79.65	24.50	10	-4.03	29%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0433	525.0	10.00	594.6	79.65	24.50	10	-0.81	6%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0521	566.6	0.0000	594.6	79.65	24.50	10	-0.33	2%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0035	570.5	19.00	594.6	79.65	24.50	10	-0.28	2%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0255	576.5	39.50	594.6	79.65	24.50	10	-0.21	2%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0541	578.0	24.00	594.6	79.65	24.50	10	-0.19	1%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0523	610.0	29.50	594.6	79.65	24.50	10	0.18	1%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0444	665.0	10.00	594.6	79.65	24.50	10	0.82	6%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0096	682.5	59.00	594.6	79.65	24.50	10	1.03	7%	0
289.30	Acid Soluble Molybdenum , ICP (100ppm)	0102	696.5	52.00	594.6	79.65	24.50	10	1.19	9%	0
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (100ppm)	0394	592.0	0.0000				2			0
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (100ppm)	0300	635.6	21.30				2			0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (100ppm)	0515	547.8	31.74	653.5	98.30	29.45	8	-0.98	8%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (100ppm)	0486	569.0	42.00	653.5	98.30	29.45	8	-0.79	6%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (100ppm)	0086	590.2	14.19	653.5	98.30	29.45	8	-0.59	5%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (100ppm)	0423	615.0	6.000	653.5	98.30	29.45	8	-0.36	3%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (100ppm)	0117	672.8	26.70	653.5	98.30	29.45	8	0.18	1%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (100ppm)	0037	700.0	20.00	653.5	98.30	29.45	8	0.43	4%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (100ppm)	0527	748.9	13.96	653.5	98.30	29.45	8	0.89	7%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (100ppm)	0106	784.5	81.00	653.5	98.30	29.45	8	1.22	10%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (100ppm)	0501	286.7*	24.40	558.9	239.2	65.66	3	-1.14	24%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (100ppm)	0368	654.5	125.0	558.9	239.2	65.66	3	0.40	9%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (100ppm)	0515	735.5	47.59	558.9	239.2	65.66	3	0.74	16%	0
289.99	Acid Soluble Molybdenum , Other (100ppm)	0027	0.07450*	0.0030	504.1	452.5	6.331	3	-1.11	50%	0
289.99	Acid Soluble Molybdenum , Other (100ppm)	0476	636.7	15.99	504.1	452.5	6.331	3	0.29	13%	0
289.99	Acid Soluble Molybdenum , Other (100ppm)	0506	875.5	3.000	504.1	452.5	6.331	3	0.82	37%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	14.95	0.4000	20.64	5.749	0.6114	7	-0.90	14%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	17.10	0.2000	20.64	5.749	0.6114	7	-0.56	9%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0521	18.39	0.0000	20.64	5.749	0.6114	7	-0.35	5%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
291.30	Acid Soluble Nickel , ICP (ppm)	0394	19.30	1.000	20.64	5.749	0.6114	7	-0.21	3%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0541	19.36	1.280	20.64	5.749	0.6114	7	-0.20	3%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0096	26.95	0.9000	20.64	5.749	0.6114	7	0.99	15%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	28.45	0.5000	20.64	5.749	0.6114	7	1.23	19%	0
291.32	Acid Soluble Nickel , ICP, 2006.03 (ppm)	0300	23.68	0.9700				1			0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0117	22.29	3.710	26.14	2.230	6.555	5	-1.73	7%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0527	26.26	0.2870	26.14	2.230	6.555	5	0.05	0%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0515	26.92	3.565	26.14	2.230	6.555	5	0.35	1%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0086	27.49	14.46	26.14	2.230	6.555	5	0.61	3%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0037	27.75	10.75	26.14	2.230	6.555	5	0.72	3%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0501	8.765	2.630	22.50	12.85	3.586	3	-1.07	31%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0368	24.50	3.000	22.50	12.85	3.586	3	0.16	4%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	34.22	5.127	22.50	12.85	3.586	3	0.91	26%	0
291.99	Acid Soluble Nickel , Other (ppm)	0519	11.60	0.0100	19.05	7.950	3.113	4	-0.94	20%	0
291.99	Acid Soluble Nickel , Other (ppm)	0476	12.97	0.2600	19.05	7.950	3.113	4	-0.77	16%	0
291.99	Acid Soluble Nickel , Other (ppm)	0255	24.20	11.28	19.05	7.950	3.113	4	0.65	14%	0
291.99	Acid Soluble Nickel , Other (ppm)	0506	27.45	0.9000	19.05	7.950	3.113	4	1.06	22%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0541	96.55	18.90	207.4	148.8	10.75	3	-0.75	27%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0501	149.2	12.90	207.4	148.8	10.75	3	-0.39	14%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0086	376.5	0.4500	207.4	148.8	10.75	3	1.14	41%	0
301.32	Acid Soluble Selenium , ICP, 2006.03 (ppm)	0300	381.3	1.000				1			0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0515	362.9	19.11	388.9	25.70	5.350	4	-1.01	3%	0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0117	375.1	1.700	388.9	25.70	5.350	4	-0.54	2%	0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0527	396.1	0.2130	388.9	25.70	5.350	4	0.28	1%	0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0037	421.5	0.3790	388.9	25.70	5.350	4	1.27	4%	0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	0515	321.6	11.24				2			0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	0368	373.0	20.00				2			0
301.99	Acid Soluble Selenium , Other (ppm)	0519	102.4	1.040	250.6	109.6	3.925	4	-1.35	30%	0
301.99	Acid Soluble Selenium , Other (ppm)	0506	238.0	10.00	250.6	109.6	3.925	4	-0.12	3%	0
301.99	Acid Soluble Selenium , Other (ppm)	0476	309.0	0.4100	250.6	109.6	3.925	4	0.53	12%	0
301.99	Acid Soluble Selenium , Other (ppm)	0255	353.2	4.250	250.6	109.6	3.925	4	0.94	20%	0
311.32	Sodium, ICP, 2006.03 test portion (%)	0324	0.6890	0.0600				2			0
311.32	Sodium, ICP, 2006.03 test portion (%)	0521	0.6895	0.0000				2			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0035	0.6510	0.0000	0.7350	0.0751	0.0102	4	-1.12	6%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0086	0.7185	0.0318	0.7350	0.0751	0.0102	4	-0.22	1%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0423	0.7375	0.0050	0.7350	0.0751	0.0102	4	0.03	0%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0527	0.8330	0.0040	0.7350	0.0751	0.0102	4	1.30	7%	0
311.99	Sodium, Other (%)	0482	0.7050	0.0300	0.7458	0.0413	0.0303	3	-0.99	3%	0
311.99	Sodium, Other (%)	0096	0.7450	0.0300	0.7458	0.0413	0.0303	3	-0.02	0%	0
311.99	Sodium, Other (%)	0354	0.7875	0.0310	0.7458	0.0413	0.0303	3	1.01	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0029	1.101	0.0570	1.177	0.0525	0.0272	13	-1.46	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0428	1.112	0.0519	1.177	0.0525	0.0272	13	-1.25	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0513	1.135	0.0100	1.177	0.0525	0.0272	13	-0.80	2%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0531	1.153	0.0330	1.177	0.0525	0.0272	13	-0.46	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0040	1.175	0.0700	1.177	0.0525	0.0272	13	-0.04	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0169	1.175	0.0100	1.177	0.0525	0.0272	13	-0.04	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0535	1.175	0.0100	1.177	0.0525	0.0272	13	-0.04	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0536	1.190	0.0200	1.177	0.0525	0.0272	13	0.25	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0539	1.190	0.0200	1.177	0.0525	0.0272	13	0.25	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0540	1.190	0.0200	1.177	0.0525	0.0272	13	0.25	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0533	1.195	0.0100	1.177	0.0525	0.0272	13	0.34	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0534	1.305	0.0300	1.177	0.0525	0.0272	13	2.43	5%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (1.3%)	0356	1.340	0.0120	1.177	0.0525	0.0272	13	3.10	7%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0102	1.075	0.0137	1.162	0.0546	0.0358	17	-1.60	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0444	1.105	0.0300	1.162	0.0546	0.0358	17	-1.05	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0324	1.115	0.0100	1.162	0.0546	0.0358	17	-0.87	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0096	1.124	0.0020	1.162	0.0546	0.0358	17	-0.70	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0472	1.130	0.0200	1.162	0.0546	0.0358	17	-0.59	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0482	1.130	0.0400	1.162	0.0546	0.0358	17	-0.59	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0234	1.135	0.0500	1.162	0.0546	0.0358	17	-0.50	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0157	1.150	0.0200	1.162	0.0546	0.0358	17	-0.23	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0255	1.160	0.2800	1.162	0.0546	0.0358	17	-0.04	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0291	1.165	0.0100	1.162	0.0546	0.0358	17	0.05	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0035	1.170	0.0000	1.162	0.0546	0.0358	17	0.14	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0433	1.183	0.0030	1.162	0.0546	0.0358	17	0.37	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0354	1.201	0.0210	1.162	0.0546	0.0358	17	0.70	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0360	1.205	0.0700	1.162	0.0546	0.0358	17	0.78	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0390	1.225	0.0290	1.162	0.0546	0.0358	17	1.14	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0371	1.240	0.0000	1.162	0.0546	0.0358	17	1.42	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0231	1.265	0.0100	1.162	0.0546	0.0358	17	1.88	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (1.3%)	0483	12,850	500.0	1.162	0.0546	0.0358	17	235525.49	552670%	2
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0541	0.9850*	0.0300	1.152	0.1235	0.0116	5	-1.36	7%	0
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0300	1.104	0.0080	1.152	0.1235	0.0116	5	-0.39	2%	0
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0394	1.150	0.0000	1.152	0.1235	0.0116	5	-0.02	0%	0
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0521	1.203	0.0000	1.152	0.1235	0.0116	5	0.41	2%	0
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0423	1.320	0.0200	1.152	0.1235	0.0116	5	1.36	7%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0106	0.9053*	0.2525	1.181	0.0718	0.0785	13	-3.84	12%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0117	1.099	0.0250	1.181	0.0718	0.0785	13	-1.14	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0072	1.125	0.1100	1.181	0.0718	0.0785	13	-0.78	2%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0086	1.130	0.0472	1.181	0.0718	0.0785	13	-0.70	2%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0397	1.159	0.0604	1.181	0.0718	0.0785	13	-0.31	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0034	1.168	0.0180	1.181	0.0718	0.0785	13	-0.18	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0037	1.169	0.0550	1.181	0.0718	0.0785	13	-0.17	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0177	1.198	0.0182	1.181	0.0718	0.0785	13	0.24	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0055	1.210	0.0200	1.181	0.0718	0.0785	13	0.41	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0527	1.245	0.0370	1.181	0.0718	0.0785	13	0.89	3%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0486	1.250	0.0200	1.181	0.0718	0.0785	13	0.96	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0515	1.259	0.2066	1.181	0.0718	0.0785	13	1.10	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (1.3%)	0136	1.265	0.1500	1.181	0.0718	0.0785	13	1.17	4%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0476	0.8615*	0.0010	1.168	0.1209	0.0462	9	-2.34	13%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0368	1.102	0.0283	1.168	0.1209	0.0462	9	-0.50	3%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0523	1.104	0.1220	1.168	0.1209	0.0462	9	-0.49	3%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0506	1.110	0.0200	1.168	0.1209	0.0462	9	-0.44	2%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0389	1.165	0.0300	1.168	0.1209	0.0462	9	-0.02	0%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0027	1.199	0.1230	1.168	0.1209	0.0462	9	0.23	1%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0515	1.230	0.0318	1.168	0.1209	0.0462	9	0.47	3%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0519	1.265	0.0100	1.168	0.1209	0.0462	9	0.74	4%	0
321.99	Acid Soluble Zinc , Other (1.3%)	0518	1.625	0.0500	1.168	0.1209	0.0462	9	3.49	20%	0
325.00	Water Soluble Zinc , AA (%)	0356	0.2340	0.0320	0.4798	0.1382	0.0284	5	-1.78	26%	0
325.00	Water Soluble Zinc , AA (%)	0537	0.5200	0.0200	0.4798	0.1382	0.0284	5	0.29	4%	0
325.00	Water Soluble Zinc , AA (%)	0532	0.5350	0.0300	0.4798	0.1382	0.0284	5	0.40	6%	0
325.00	Water Soluble Zinc , AA (%)	0539	0.5550	0.0300	0.4798	0.1382	0.0284	5	0.54	8%	0
325.00	Water Soluble Zinc , AA (%)	0540	0.5550	0.0300	0.4798	0.1382	0.0284	5	0.54	8%	0
325.30	Water Soluble Zinc , ICP (%)	0444	0.4300	0.0200				2			0
325.30	Water Soluble Zinc , ICP (%)	0402	1.300	0.0200				2			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. A 9 flag indicates a data problem - scores not calculated. 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 astrich 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.