

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Methods: 147

Sample # 151211

Statistical Summary

Labs Reporting: 88

Grade 10-10-10

Issue Date : 01/31/2016

Method Code	Analyte & Method	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	7	7	9.644	0.6334	9.835		0.1434	0.0383	1.46%		0.0302	2.84%
001.99	Ammoniacal Nitrogen, Other (%)	15	15	9.606	0.6021	9.787		0.1704	0.0311	1.74%		0.0799	2.84%
002.99	Nitrate Nitrogen, Other (%)	2	2	0.4580	0.6180								
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	2	2	9.675	0.1061								
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	1		10.08									
010.11	Total Nitrogen, Modified Comprehensive (10%)	9	8	9.820	0.1144	9.814	0.5796	0.0947	0.0237	0.97%	2.95%	0.0500	2.84%
010.12	Total Nitrogen, Salicylic (10%)	3	3	9.977	0.1097	9.977	0.5796	0.1097	0.0448	1.10%	2.90%	0.0533	2.83%
010.60	Total Nitrogen, Combustion (10%)	63	62	9.975	0.1437	9.977	0.5796	0.1250	0.0112	1.25%	2.90%	0.0785	2.83%
010.99	Total Nitrogen, Other (10%)	4	4	9.994	0.2201	9.994	0.5796	0.2201	0.0778	2.20%	2.90%	0.1575	2.83%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ... (%)	6	6	9.984	0.1105	10.04		0.0300	0.0087	0.30%		0.0350	2.83%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	18	17	9.985	0.2098	10.01		0.1735	0.0298	1.73%		0.0933	2.83%
020.40	Total Phosphorus as P2O5, Automated (%)	3	3	9.932	0.0454	9.932		0.0454	0.0185	0.46%		0.2167	2.83%
020.50	Total Phosphorus as P2O5, ICP (%)	15	15	10.69	2.441	10.07		0.5012	0.0915	4.98%		0.2339	2.83%
020.99	Total Phosphorus as P2O5, Other (%)	3	3	9.977	0.1290	9.977		0.1290	0.0527	1.29%		0.0400	2.83%
030.20	Citrate Insoluble Phosphorus as P2O5, Spectrophoto... (%)	1		0.0800									
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t... (%)	1		0.0850									
040.40	Indirect Available Phosphorus as P2O5, Automated (10%)	1		9.885									
040.50	Indirect Available Phosphorus as P2O5, ICP (10%)	1		9.925									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q... (10%)	8	8	9.926	0.1357	9.926	0.6880	0.1529	0.0382	1.54%	3.47%	0.0657	2.83%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q... (10%)	3	3	9.772	0.0875	9.772	0.6880	0.0875	0.0357	0.90%	3.52%	0.0833	2.84%
041.20	Direct Available Phosphorus as P2O5, Spectrophotom... (10%)	2	2	9.642	0.3649								
041.21	Direct Available Phosphorus as P2O5, Spectrophotom... (10%)	2	2	9.958	0.1379								
041.31	Direct Available Phosphorus as P2O5, Alkalimetric ... (10%)	1		9.740									
041.40	Direct Available Phosphorus as P2O5, Automated (10%)	2	2	9.910	0.6010								
041.50	Direct Available Phosphorus as P2O5, ICP (10%)	4	4	9.664	0.4542	9.664	0.6880	0.4542	0.1606	4.70%	3.56%	0.2284	2.84%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (10%)	8	8	9.788	0.4356	9.809	0.6880	0.4220	0.1055	4.30%	3.51%	0.0396	2.84%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ... (10%)	12	12	9.807	0.3355	9.745	0.6880	0.1682	0.0343	1.73%	3.53%	0.1162	2.84%
041.99	Direct Available Phosphorus as P2O5, Other (10%)	4	4	9.755	0.1383	9.755	0.6880	0.1383	0.0489	1.42%	3.53%	0.1250	2.84%
048.10	Water Soluble Phosphorus as P2O5, Gravimetric Quin... (%)	1		8.100									
048.20	Water Soluble Phosphorus as P2O5, Spectrophotometr... (%)	2	2	8.205	0.0919								
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		8.100									

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048.50	Water Soluble Phosphorus as P2O5, ICP (%)	2	2	9.183	1.333								
048.99	Water Soluble Phosphorus as P2O5, Other (%)	1		8.230									
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	13	12	10.31	0.3724	10.32	0.7122	0.1819	0.0371	1.76%	3.45%	0.0800	2.82%
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	7	7	10.57	0.8107	10.43	0.7122	0.5755	0.1538	5.52%	3.42%	0.1233	2.81%
050.31	Soluble Potassium as K2O, AA (Citrate) (10%)	1		9.935									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	10	10	10.29	0.4201	10.35	0.7122	0.3574	0.0799	3.45%	3.44%	0.1762	2.81%
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	5	5	10.49	0.1222	10.49	0.7122	0.1222	0.0387	1.17%	3.39%	0.2700	2.81%
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	10	10	10.32	0.4114	10.45	0.7122	0.2053	0.0459	1.97%	3.41%	0.0985	2.81%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala... (10%)	5	5	10.17	0.3091	10.17	0.7122	0.3091	0.0977	3.04%	3.50%	0.0400	2.82%
050.61	Soluble Potassium as K2O, Flame Photometric (Citra... (10%)	2	2	10.39	0.2510								
050.62	Soluble Potassium as K2O, Flame Photometric (Citra... (10%)	5	5	10.27	0.1534	10.27	0.7122	0.1534	0.0485	1.49%	3.47%	0.1344	2.82%
050.99	Soluble Potassium as K2O, Other (10%)	25	24	10.17	0.4929	10.13	0.7122	0.4538	0.0655	4.48%	3.51%	0.1578	2.82%
060.00	Water (Free), Vacuum Oven (%)	3	3	0.4315	0.2455	0.4315		0.2455	0.1002	56.90%		0.0398	4.54%
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours,... (%)	2	2	0.8575	0.3642								
060.99	Water (Free), Other (%)	2	2	0.5700	0.3889								
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	1		6.706									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	11	10	7.043	0.3085	7.035		0.3348	0.0749	4.76%		0.1299	2.98%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C (%)	1		7.655									
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (%)	3	3	7.077	0.4534	7.077		0.4534	0.1851	6.41%		0.1134	2.98%
101.99	Acid Soluble Calcium, Other (%)	2	2	6.500	0.8697								
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (1.2%)	9	9	1.149	0.1937	1.085	0.2532	0.0495	0.0117	4.56%	11.66%	0.0517	3.95%
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2... (1.2%)	1		1.085									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (1.2%)	27	26	1.052	0.0826	1.053	0.2532	0.0752	0.0104	7.14%	12.02%	0.0203	3.97%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A... (1.2%)	2	2	0.9850	0.0707								
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (1.2%)	11	10	1.060	0.0955	1.051	0.2532	0.0859	0.0192	8.17%	12.04%	0.0333	3.97%
121.99	Acid Soluble Magnesium, Other (1.2%)	9	9	1.377	0.6389	1.163	0.2532	0.2270	0.0535	19.51%	10.88%	0.0429	3.91%
131.00	Water Soluble Magnesium, AA (%)	5	5	0.9159	0.0993	0.9159		0.0993	0.0314	10.84%		0.0455	4.05%
131.30	Water Soluble Magnesium, ICP (%)	8	7	0.9270	0.1419	0.9342		0.1160	0.0310	12.41%		0.0250	4.04%
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	1		1.175									
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon disu... (%)	5	4	1.253	0.3462	1.253		0.3462	0.1224	27.63%		0.1995	3.87%
143.99	Elemental Sulfur, Other (%)	4	1	1.390		1.253		0.3462	0.2448	27.63%		0.0400	3.87%
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - ... (%)	9	9	11.46	0.6588	11.33		0.2066	0.0487	1.82%		0.0915	2.78%
147.99	Total Sulfur in Urea/Formulations, Other (Identify) (%)	1		12.25									
148.00	Total Sulfur, Combustion (10%)	5	5	12.22	0.3752	12.22	0.7999	0.3752	0.1187	3.07%	3.27%	0.2920	2.74%
148.01	Total Sulfur, Gravimetric - sulfate and elemental... (10%)	15	15	12.14	0.7168	12.16	0.7999	0.7810	0.1426	6.42%	3.29%	0.1562	2.75%
148.04	Total Sulfur, ICP, w/Br digestion (10%)	1		10.85									
148.07	Total Sulfur, ICP, test portion as in 2006.03 modi... (10%)	12	11	11.90	1.348	12.23	0.7999	0.9113	0.1943	7.45%	3.27%	0.1641	2.74%
148.99	Total Sulfur, Other (10%)	10	10	11.63	1.471	11.34	0.7999	1.209	0.2702	10.66%	3.53%	0.3313	2.78%
149.04	Sulfur - HNO3 soluble, ICP (%)	3	3	11.37	1.260	11.37		1.260	0.5142	11.08%		0.1464	2.77%
151.00	Acid Soluble Arsenic , AA, test portion as in 200... (ppm)	1		2.200									
151.30	Acid Soluble Arsenic , ICP (ppm)	6	5	2.520	0.7508	2.520		0.7508	0.2374	29.80%		0.1900	13.92%
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified w/9:... (ppm)	3	3	2.510	1.647	2.510		1.647	0.6723	65.61%		0.4360	13.93%

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151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	1		0.6190									
165.00	Acid Soluble Boron , Spectrophotometric (0.06%)	6	5	0.0322	0.0046	0.0322	0.0075	0.0046	0.0015	14.30%	11.66%	0.0004	6.71%
165.30	Acid Soluble Boron , ICP, test portion in 982.01 ... (0.06%)	10	10	0.0311	0.0108	0.0288	0.0075	0.0036	0.0008	12.52%	13.02%	0.0015	6.82%
165.99	Acid Soluble Boron , Other (0.06%)	16	15	0.0314	0.0084	0.0302	0.0075	0.0052	0.0010	17.30%	12.44%	0.0018	6.77%
171.99	Water Soluble Boron , Other (%)	2	2	0.0273	0.0025								
181.00	Acid Soluble Cadmium , AA, test portion as in 200... (ppm)	1		1.200									
181.30	Acid Soluble Cadmium , ICP (ppm)	10	9	1.244	0.2075	1.244		0.2343	0.0552	18.84%		0.1338	15.48%
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9:... (ppm)	3	3	1.882	0.9186	1.882		0.9186	0.3750	48.81%		0.3477	14.54%
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	1		0.0000									
181.99	Acid Soluble Cadmium , Other (ppm)	3	3	1.197	0.1450	1.197		0.1450	0.0592	12.12%		0.1133	15.57%
191.30	Acid Soluble Chromium , ICP (ppm)	10	10	26.85	3.779	26.88		4.205	0.9403	15.64%		0.9133	9.75%
191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9... (ppm)	4	4	31.05	3.577	31.05		3.577	1.265	11.52%		2.325	9.54%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	1		27.77									
191.99	Acid Soluble Chromium , Other (ppm)	3	3	32.17	0.8621	32.17		0.8621	0.3520	2.68%		3.144	9.49%
202.30	Acid Soluble Cobalt , ICP (ppm)	9	8	2.242	0.4410	2.234		0.4854	0.1214	21.73%		0.2976	14.17%
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	1		2.330									
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3... (ppm)	3	3	2.839	0.4511	2.839		0.4511	0.1841	15.89%		0.4162	13.67%
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	1		0.4663									
202.99	Acid Soluble Cobalt , Other (ppm)	3	3	6.913	4.620	6.913		4.620	1.886	66.82%		1.689	11.96%
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.05%)	8	8	0.0447	0.0029	0.0447	0.0094	0.0033	0.0008	7.32%	10.55%	0.0021	6.39%
221.03	Acid Soluble Copper , AA, 965.09, test portion 20... (0.05%)	2	2	0.0440	0.0035								
221.30	Acid Soluble Copper , ICP, test portion inorganic... (0.05%)	25	24	0.0425	0.0069	0.0443	0.0094	0.0033	0.0005	7.52%	10.65%	0.0034	6.39%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-... (0.05%)	2	2	0.0448	0.0039								
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-... (0.05%)	6	6	0.1171	0.1852	0.0440	0.0094	0.0095	0.0027	21.59%	10.71%	0.0036	6.40%
221.99	Acid Soluble Copper , Other (0.05%)	8	8	0.0450	0.0043	0.0449	0.0094	0.0046	0.0012	10.33%	10.50%	0.0019	6.38%
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.8%)	4	4	0.5527	0.0305	0.5527	0.0551	0.0305	0.0108	5.52%	4.98%	0.0190	4.37%
241.03	Acid Soluble Iron , AA, 965.09, test portion 2006.... (0.8%)	1		0.5590									
241.30	Acid Soluble Iron , ICP, test portion inorganic 96... (0.8%)	26	25	0.4854	0.0482	0.4880	0.0551	0.0447	0.0063	9.15%	5.64%	0.0150	4.46%
241.32	Acid Soluble Iron , ICP, test portion 2006.03A-C ... (0.8%)	2	2	0.4885	0.0537								
241.33	Acid Soluble Iron , ICP, test portion 2006.03A-C, ... (0.8%)	10	10	0.5279	0.0737	0.5123	0.0551	0.0392	0.0088	7.65%	5.38%	0.0137	4.42%
241.99	Acid Soluble Iron , Other (0.8%)	7	7	0.4752	0.1062	0.4919	0.0551	0.0177	0.0047	3.59%	5.60%	0.0157	4.45%
251.00	Acid Soluble Lead , AA, test portion as in 2006.0... (ppm)	1		297.5									
251.30	Acid Soluble Lead , ICP (ppm)	11	11	260.1	40.87	260.5		45.37	9.673	17.41%		10.24	6.93%
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 H... (ppm)	4	4	270.5	34.60	270.5		34.60	12.23	12.79%		7.126	6.89%
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	1		254.8									
251.99	Acid Soluble Lead , Other (ppm)	4	4	262.9	33.23	262.9		33.23	11.75	12.64%		2.750	6.92%
261.00	Acid Soluble Manganese , AA, Mn2+ only (0.25%)	1		0.0778									
261.11	Acid Soluble Manganese , AA, total Mn (0.25%)	2	2	0.0633	0.0096								
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (0.25%)	4	4	0.0853	0.0077	0.0853	0.0131	0.0077	0.0027	9.02%	7.67%	0.0041	5.79%
261.13	Acid Soluble Manganese , AA, organic 965.09 (0.25%)	1		0.0200									
261.15	Acid Soluble Manganese , AA, 965.09, test portion... (0.25%)	1		0.1111									
261.30	Acid Soluble Manganese , ICP, test portion 972.02... (0.25%)	14	14	0.0836	0.0105	0.0820	0.0131	0.0073	0.0014	8.87%	7.97%	0.0024	5.83%

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261.31	Acid Soluble Manganese , ICP, test portion 972.02... (0.25%)	5	5	0.0784	0.0130	0.0784	0.0131	0.0130	0.0041	16.57%	8.33%	0.0043	5.87%
261.32	Acid Soluble Manganese , ICP, test portion inorga... (0.25%)	6	5	0.0785	0.0085	0.0785	0.0131	0.0085	0.0027	10.85%	8.33%	0.0036	5.87%
261.34	Acid Soluble Manganese , ICP, test portion 2006.0... (0.25%)	2	2	0.0824	0.0121								
261.35	Acid Soluble Manganese , ICP, test portion 2006.0... (0.25%)	9	8	0.0791	0.0085	0.0802	0.0131	0.0069	0.0017	8.56%	8.15%	0.0033	5.85%
261.99	Acid Soluble Manganese , Other (0.25%)	8	8	0.0870	0.0221	0.0797	0.0131	0.0064	0.0016	8.01%	8.20%	0.0025	5.85%
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	4	4	0.0404	0.0398	0.0404		0.0398	0.0141	98.47%		0.0007	6.48%
271.99	Water Soluble Manganese , Other (%)	2	2	0.0468	0.0392								
281.30	Acid Soluble Mercury , ICP (ppm)	2	2	110.5	2.815								
289.30	Acid Soluble Molybdenum , ICP (30ppm)	8	7	359.4	44.65	356.5	106.1993	44.92	12.00	12.60%	14.89%	7.339	6.61%
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (30ppm)	1		0.0325									
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w... (30ppm)	6	6	359.0	36.33	359.4	106.1993	29.61	8.547	8.24%	14.78%	13.89	6.60%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (30ppm)	2	2	303.4	68.44								
289.99	Acid Soluble Molybdenum , Other (30ppm)	3	3	318.0	291.8	318.0	106.1993	291.8	119.1	91.75%	16.70%	8.637	6.72%
291.00	Acid Soluble Nickel , AA, test portion as in 2006... (ppm)	1		166.0									
291.30	Acid Soluble Nickel , ICP (ppm)	10	10	147.1	19.74	147.1		22.39	5.006	15.22%		8.013	7.55%
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3... (ppm)	3	3	172.0	10.91	172.0		10.91	4.454	6.34%		9.454	7.37%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	2	2	120.2	49.04								
291.99	Acid Soluble Nickel , Other (ppm)	4	4	133.7	78.47	133.7		78.47	27.74	58.68%		7.990	7.66%
301.30	Acid Soluble Selenium , ICP (ppm)	3	2	0.5575	0.4632	0.5575		0.4632	0.2316	83.08%		0.1150	17.47%
301.33	Acid Soluble Selenium , ICP, 2006.03 modified w/9... (ppm)	1		0.0000									
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	1		0.0000									
311.30	Sodium, Flame Photometric (%)	1		0.3200									
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test ... (%)	5	5	0.2459	0.1232	0.2459		0.1232	0.0390	50.10%		0.0052	4.94%
311.99	Sodium, Other (%)	4	4	0.3331	0.0800	0.3331		0.0800	0.0283	24.03%		0.0073	4.72%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	8	7	0.5671	0.0549	0.5687	0.0633	0.0587	0.0157	10.31%	5.56%	0.0099	4.35%
321.03	Acid Soluble Zinc , AA, 965.09, test portion 2006... (0.5%)	1		0.5340									
321.30	Acid Soluble Zinc , ICP, test portion inorganic 9... (0.5%)	28	27	0.5974	0.0589	0.5939	0.0633	0.0576	0.0078	9.70%	5.33%	0.0449	4.33%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C ... (0.5%)	2	2	0.6418	0.0675								
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C,... (0.5%)	9	9	0.5696	0.0298	0.5686	0.0633	0.0319	0.0075	5.60%	5.56%	0.0278	4.35%
321.99	Acid Soluble Zinc , Other (0.5%)	10	10	0.5685	0.0908	0.5638	0.0633	0.0579	0.0129	10.27%	5.61%	0.0470	4.36%
325.00	Water Soluble Zinc , AA (%)	1		0.3480									
325.30	Water Soluble Zinc , ICP (%)	6	6	0.2139	0.1115	0.1951		0.0840	0.0242	43.06%		0.0169	5.11%

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 151211

Grade 10-10-10

Method Precision Report

Issue Date : 01/31/2016

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility SR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	7	6	9.879	0.1351	0.1334	0.0303	0.1368	1.35%	0.31%	1.38%	4.518
001.99	Ammoniacal Nitrogen, Other (%)	15	14	9.746	0.2681	0.2635	0.0695	0.2725	2.70%	0.71%	2.80%	3.920
010.11	Total Nitrogen, Modified Comprehensive (10%)	9	8	9.820	0.1144	0.1089	0.0494	0.1196	1.11%	0.50%	1.22%	2.422
010.60	Total Nitrogen, Combustion (10%)	63	57	9.973	0.1248	0.1171	0.0611	0.1321	1.17%	0.61%	1.32%	2.161
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium MolybdoP (%)	6	5	9.971	0.1181	0.1175	0.0170	0.1187	1.18%	0.17%	1.19%	6.973
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	18	16	10.02	0.1541	0.1405	0.0895	0.1666	1.40%	0.89%	1.66%	1.862
020.50	Total Phosphorus as P2O5, ICP (%)	15	13	10.14	0.5060	0.4890	0.1840	0.5225	4.82%	1.81%	5.15%	2.839
041.10	Direct Available Phosphorus as P2O5, Gravimetric Quinolinium (10%)	8	7	9.901	0.1266	0.1232	0.0413	0.1299	1.24%	0.42%	1.31%	3.144
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-EDTA Ext. (10%)	8	8	9.788	0.4356	0.4351	0.0299	0.4361	4.45%	0.31%	4.46%	14.59
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (10%)	12	10	9.710	0.1897	0.1839	0.0662	0.1954	1.89%	0.68%	2.01%	2.953
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	13	11	10.39	0.2536	0.2482	0.0737	0.2589	2.39%	0.71%	2.49%	3.515
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	7	7	10.57	0.8107	0.8075	0.1025	0.8140	7.64%	0.97%	7.70%	7.942
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	10	10	10.29	0.4201	0.4005	0.1795	0.4389	3.89%	1.74%	4.26%	2.445
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	10	9	10.40	0.3457	0.3427	0.0640	0.3486	3.30%	0.62%	3.35%	5.446
050.99	Soluble Potassium as K2O, Other (10%)	25	21	10.10	0.4202	0.4129	0.1106	0.4275	4.09%	1.10%	4.23%	3.863
101.30	Acid Soluble Calcium, ICP, test portion inorganic 965.09 (%)	11	9	7.045	0.3271	0.3201	0.0954	0.3340	4.54%	1.35%	4.74%	3.500
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (1.2%)	9	8	1.088	0.0648	0.0597	0.0357	0.0695	5.49%	3.28%	6.39%	1.950
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (1.2%)	27	24	1.057	0.0675	0.0663	0.0185	0.0688	6.27%	1.75%	6.51%	3.728
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A-C, w/dual acid (1.2%)	11	9	1.037	0.0644	0.0608	0.0300	0.0678	5.87%	2.90%	6.54%	2.259
121.99	Acid Soluble Magnesium, Other (1.2%)	9	7	1.077	0.1184	0.1173	0.0231	0.1195	10.89%	2.14%	11.10%	5.176
131.30	Water Soluble Magnesium, ICP (%)	8	7	0.9270	0.1419	0.1411	0.0216	0.1428	15.22%	2.33%	15.40%	6.607
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - sulfate form (%)	9	8	11.27	0.3534	0.3481	0.0859	0.3586	3.09%	0.76%	3.18%	4.176
148.01	Total Sulfur, Gravimetric - sulfate and elemental (10%)	15	15	12.14	0.7168	0.7087	0.1513	0.7247	5.84%	1.25%	5.97%	4.790
148.07	Total Sulfur, ICP, test portion as in 2006.03 modified w/9:3 HNO3:HCl (10%)	12	11	11.90	1.348	1.345	0.1323	1.352	11.31%	1.11%	11.36%	10.22
148.99	Total Sulfur, Other (10%)	10	10	11.63	1.471	1.449	0.3561	1.492	12.46%	3.06%	12.83%	4.191
151.30	Acid Soluble Arsenic , ICP (ppm)	6	5	2.520	0.7508	0.7387	0.1902	0.7628	29.32%	7.55%	30.27%	4.010
165.00	Acid Soluble Boron , Spectrophotometric (0.06%)	6	4	0.0323	0.0053	0.0053	0.0000	0.0053	16.48%	0.00%	16.48%	
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (0.06%)	10	9	0.0279	0.0038	0.0036	0.0017	0.0040	12.77%	6.17%	14.19%	2.298
165.99	Acid Soluble Boron , Other (0.06%)	16	13	0.0294	0.0060	0.0059	0.0014	0.0061	20.15%	4.88%	20.73%	4.248
181.30	Acid Soluble Cadmium , ICP (ppm)	10	8	1.266	0.2111	0.2022	0.0858	0.2197	15.98%	6.78%	17.36%	2.559

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 %rstd	Reproducibility %RSD	sR/sr
191.30	Acid Soluble Chromium , ICP (ppm)	10	10	26.85	3.779	3.725	0.8928	3.831	13.88%	3.33%	14.27%	4.291
202.30	Acid Soluble Cobalt , ICP (ppm)	9	8	2.242	0.4410	0.3872	0.2984	0.4889	17.27%	13.31%	21.80%	1.638
221.00	Acid Soluble Copper , AA, inorganic 965.09 (0.05%)	8	7	0.0442	0.0028	0.0027	0.0013	0.0030	6.02%	3.04%	6.74%	2.216
221.30	Acid Soluble Copper , ICP, test portion inorganic 965.09 (0.05%)	25	23	0.0435	0.0050	0.0044	0.0035	0.0056	10.04%	8.01%	12.84%	1.604
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-C, w/dual acid (0.05%)	6	5	0.0416	0.0067	0.0065	0.0021	0.0068	15.63%	4.99%	16.41%	3.287
221.99	Acid Soluble Copper , Other (0.05%)	8	7	0.0440	0.0035	0.0034	0.0010	0.0036	7.72%	2.39%	8.08%	3.386
241.30	Acid Soluble Iron , ICP, test portion inorganic 965.09 (0.8%)	26	24	0.4838	0.0485	0.0477	0.0126	0.0493	9.86%	2.61%	10.20%	3.909
241.33	Acid Soluble Iron , ICP, test portion 2006.03A-C, w/dual acid (0.8%)	10	9	0.5066	0.0313	0.0302	0.0116	0.0324	5.96%	2.29%	6.39%	2.795
241.99	Acid Soluble Iron , Other (0.8%)	7	6	0.5119	0.0469	0.0464	0.0100	0.0475	9.07%	1.95%	9.27%	4.746
251.30	Acid Soluble Lead , ICP (ppm)	11	11	260.1	40.87	40.43	8.469	41.31	15.55%	3.26%	15.88%	4.877
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (0.25%)	14	13	0.0813	0.0060	0.0058	0.0024	0.0063	7.10%	2.97%	7.69%	2.591
261.32	Acid Soluble Manganese , ICP, test portion inorganic 965.09 (0.25%)	6	4	0.0793	0.0096	0.0095	0.0014	0.0096	12.00%	1.76%	12.13%	6.886
261.35	Acid Soluble Manganese , ICP, test portion 2006.03A-C, w/dual acid (0.25%)	9	7	0.0816	0.0048	0.0044	0.0028	0.0052	5.37%	3.38%	6.35%	1.877
261.99	Acid Soluble Manganese , Other (0.25%)	8	7	0.0796	0.0080	0.0079	0.0018	0.0081	9.91%	2.24%	10.16%	4.530
289.30	Acid Soluble Molybdenum , ICP (30ppm)	8	6	369.1	39.97	39.86	4.094	40.07	10.80%	1.11%	10.86%	9.788
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w/9:3 HNO3:HCl (30ppm)	6	6	359.0	36.33	35.25	12.45	37.38	9.82%	3.47%	10.41%	3.003
291.30	Acid Soluble Nickel , ICP (ppm)	10	10	147.1	19.74	19.12	6.972	20.35	13.00%	4.74%	13.83%	2.919
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	8	7	0.5671	0.0549	0.0545	0.0095	0.0553	9.60%	1.68%	9.75%	5.796
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (0.5%)	28	26	0.5910	0.0494	0.0439	0.0320	0.0543	7.43%	5.41%	9.19%	1.699
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, w/dual acid (0.5%)	9	9	0.5696	0.0298	0.0247	0.0235	0.0341	4.34%	4.12%	5.99%	1.452
321.99	Acid Soluble Zinc , Other (0.5%)	10	10	0.5685	0.0908	0.0848	0.0457	0.0963	14.92%	8.04%	16.95%	2.107
325.30	Water Soluble Zinc , ICP (%)	6	6	0.2139	0.1115	0.1109	0.0166	0.1121	51.85%	7.78%	52.43%	6.737

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Methods: 147

Sample # 151211

Lab Values

Labs Reporting: 88

Grade 10-10-10

Issue Date : 01/31/2016

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0230	8.235	0.0700	9.835	0.1434	0.0302	7	-11.16	8%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0177	9.693	0.0017	9.835	0.1434	0.0302	7	-0.99	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0500	9.820	0.0000	9.835	0.1434	0.0302	7	-0.10	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0169	9.835	0.0300	9.835	0.1434	0.0302	7	0.00	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0444	9.910	0.1000	9.835	0.1434	0.0302	7	0.53	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0481	9.915	0.0100	9.835	0.1434	0.0302	7	0.56	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0498	10.10	0.0000	9.835	0.1434	0.0302	7	1.85	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0501	7.640	0.1000	9.787	0.1704	0.0799	15	-12.60	11%	0
001.99	Ammoniacal Nitrogen, Other (%)	0368	9.105	0.0300	9.787	0.1704	0.0799	15	-4.00	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0397	9.221	0.1557	9.787	0.1704	0.0799	15	-3.32	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0513	9.640	0.0600	9.787	0.1704	0.0799	15	-0.86	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	9.747	0.0230	9.787	0.1704	0.0799	15	-0.24	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0420	9.755	0.1300	9.787	0.1704	0.0799	15	-0.19	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0508	9.780	0.0600	9.787	0.1704	0.0799	15	-0.04	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0510	9.810	0.0200	9.787	0.1704	0.0799	15	0.13	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0027	9.820	0.1000	9.787	0.1704	0.0799	15	0.19	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0371	9.830	0.2200	9.787	0.1704	0.0799	15	0.25	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0220	9.890	0.1200	9.787	0.1704	0.0799	15	0.60	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	9.920	0.0400	9.787	0.1704	0.0799	15	0.78	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0405	9.930	0.0200	9.787	0.1704	0.0799	15	0.84	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0200	9.950	0.0200	9.787	0.1704	0.0799	15	0.95	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	10.05	0.1000	9.787	0.1704	0.0799	15	1.54	1%	0
002.99	Nitrate Nitrogen, Other (%)	0394	0.0210	0.0060	0.4580	0.6180	0.0480	2	-0.71	48%	0
002.99	Nitrate Nitrogen, Other (%)	0501	0.8950	0.0900	0.4580	0.6180	0.0480	2	0.71	48%	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0309	9.600	0.0800	9.675	0.1061	0.0500	2	-0.71	0%	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0090	9.750	0.0200	9.675	0.1061	0.0500	2	0.71	0%	0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0513	10.08	0.0600			0.0600	1			0
010.11	Total Nitrogen, Modified Comprehensive (10%)	0137	9.635	0.0300	9.814	0.0947	0.0500	8	-1.89	1%	0
010.11	Total Nitrogen, Modified Comprehensive (10%)	0211	9.750	0.1000	9.814	0.0947	0.0500	8	-0.67	0%	0
010.11	Total Nitrogen, Modified Comprehensive (10%)	0416	9.780	0.0000	9.814	0.0947	0.0500	8	-0.36	0%	0
010.11	Total Nitrogen, Modified Comprehensive (10%)	0309	9.795	0.1500	9.814	0.0947	0.0500	8	-0.20	0%	0
010.11	Total Nitrogen, Modified Comprehensive (10%)	0114	9.820	0.0000	9.814	0.0947	0.0500	8	0.07	0%	0
010.11	Total Nitrogen, Modified Comprehensive (10%)	0105	9.870	0.0200	9.814	0.0947	0.0500	8	0.59	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.11	Total Nitrogen, Modified Comprehensive (10%)	0220	9.880	0.0400	9.814	0.0947	0.0500	8	0.70	0%	0
010.11	Total Nitrogen, Modified Comprehensive (10%)	0510	10.03	0.0600	9.814	0.0947	0.0500	8	2.28	1%	0
010.11	Total Nitrogen, Modified Comprehensive (10%)	0371	9.760	0.3200	9.814	0.0947	0.0500	8	-0.57	0%	1
010.12	Total Nitrogen, Salicylic (10%)	0481	9.890	0.0600	9.977	0.1097	0.0533	3	-0.79	0%	0
010.12	Total Nitrogen, Salicylic (10%)	0117	9.940	0.1000	9.977	0.1097	0.0533	3	-0.33	0%	0
010.12	Total Nitrogen, Salicylic (10%)	0498	10.10	0.0000	9.977	0.1097	0.0533	3	1.12	1%	0
010.60	Total Nitrogen, Combustion (10%)	0275	9.600	0.1600	9.977	0.1250	0.0785	62	-3.02	2%	0
010.60	Total Nitrogen, Combustion (10%)	0472	9.657	0.0100	9.977	0.1250	0.0785	62	-2.56	2%	0
010.60	Total Nitrogen, Combustion (10%)	0007	9.700	0.0000	9.977	0.1250	0.0785	62	-2.22	1%	0
010.60	Total Nitrogen, Combustion (10%)	0037	9.745	0.3500	9.977	0.1250	0.0785	62	-1.86	1%	0
010.60	Total Nitrogen, Combustion (10%)	0035	9.780	0.0800	9.977	0.1250	0.0785	62	-1.58	1%	0
010.60	Total Nitrogen, Combustion (10%)	0354	9.803	0.0030	9.977	0.1250	0.0785	62	-1.40	1%	0
010.60	Total Nitrogen, Combustion (10%)	0423	9.805	0.0900	9.977	0.1250	0.0785	62	-1.38	1%	0
010.60	Total Nitrogen, Combustion (10%)	0422	9.816	0.1020	9.977	0.1250	0.0785	62	-1.29	1%	0
010.60	Total Nitrogen, Combustion (10%)	0095	9.820	0.0200	9.977	0.1250	0.0785	62	-1.26	1%	0
010.60	Total Nitrogen, Combustion (10%)	0368	9.829	0.0024	9.977	0.1250	0.0785	62	-1.19	1%	0
010.60	Total Nitrogen, Combustion (10%)	0485	9.834	0.0780	9.977	0.1250	0.0785	62	-1.14	1%	0
010.60	Total Nitrogen, Combustion (10%)	0025	9.849	0.0430	9.977	0.1250	0.0785	62	-1.03	1%	0
010.60	Total Nitrogen, Combustion (10%)	0162	9.864	0.0720	9.977	0.1250	0.0785	62	-0.90	1%	0
010.60	Total Nitrogen, Combustion (10%)	0105	9.875	0.0100	9.977	0.1250	0.0785	62	-0.82	1%	0
010.60	Total Nitrogen, Combustion (10%)	0356	9.895	0.0700	9.977	0.1250	0.0785	62	-0.66	0%	0
010.60	Total Nitrogen, Combustion (10%)	0377	9.900	0.1000	9.977	0.1250	0.0785	62	-0.62	0%	0
010.60	Total Nitrogen, Combustion (10%)	0049	9.900	0.0000	9.977	0.1250	0.0785	62	-0.62	0%	0
010.60	Total Nitrogen, Combustion (10%)	0023	9.904	0.0804	9.977	0.1250	0.0785	62	-0.58	0%	0
010.60	Total Nitrogen, Combustion (10%)	0043	9.915	0.0900	9.977	0.1250	0.0785	62	-0.50	0%	0
010.60	Total Nitrogen, Combustion (10%)	0406	9.915	0.2100	9.977	0.1250	0.0785	62	-0.50	0%	0
010.60	Total Nitrogen, Combustion (10%)	0481	9.920	0.0600	9.977	0.1250	0.0785	62	-0.46	0%	0
010.60	Total Nitrogen, Combustion (10%)	0157	9.925	0.0900	9.977	0.1250	0.0785	62	-0.42	0%	0
010.60	Total Nitrogen, Combustion (10%)	0231	9.935	0.0100	9.977	0.1250	0.0785	62	-0.34	0%	0
010.60	Total Nitrogen, Combustion (10%)	0324	9.935	0.1300	9.977	0.1250	0.0785	62	-0.34	0%	0
010.60	Total Nitrogen, Combustion (10%)	0291	9.945	0.0100	9.977	0.1250	0.0785	62	-0.26	0%	0
010.60	Total Nitrogen, Combustion (10%)	0405	9.955	0.0100	9.977	0.1250	0.0785	62	-0.18	0%	0
010.60	Total Nitrogen, Combustion (10%)	0131	9.961	0.0051	9.977	0.1250	0.0785	62	-0.13	0%	0
010.60	Total Nitrogen, Combustion (10%)	0260	9.965	0.0500	9.977	0.1250	0.0785	62	-0.10	0%	0
010.60	Total Nitrogen, Combustion (10%)	0096	9.970	0.1200	9.977	0.1250	0.0785	62	-0.06	0%	0
010.60	Total Nitrogen, Combustion (10%)	0394	9.980	0.0600	9.977	0.1250	0.0785	62	0.02	0%	0
010.60	Total Nitrogen, Combustion (10%)	0028	9.988	0.0160	9.977	0.1250	0.0785	62	0.09	0%	0
010.60	Total Nitrogen, Combustion (10%)	0233	9.989	0.1630	9.977	0.1250	0.0785	62	0.09	0%	0
010.60	Total Nitrogen, Combustion (10%)	0501	9.990	0.0200	9.977	0.1250	0.0785	62	0.10	0%	0
010.60	Total Nitrogen, Combustion (10%)	0234	9.995	0.0900	9.977	0.1250	0.0785	62	0.14	0%	0
010.60	Total Nitrogen, Combustion (10%)	0457	9.995	0.2100	9.977	0.1250	0.0785	62	0.14	0%	0
010.60	Total Nitrogen, Combustion (10%)	0042	10.00	0.0000	9.977	0.1250	0.0785	62	0.18	0%	0
010.60	Total Nitrogen, Combustion (10%)	0482	10.00	0.0000	9.977	0.1250	0.0785	62	0.18	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total Nitrogen, Combustion (10%)	0451	10.00	0.1950	9.977	0.1250	0.0785	62	0.20	0%	0
010.60	Total Nitrogen, Combustion (10%)	0136	10.01	0.0900	9.977	0.1250	0.0785	62	0.22	0%	0
010.60	Total Nitrogen, Combustion (10%)	0177	10.02	0.0200	9.977	0.1250	0.0785	62	0.34	0%	0
010.60	Total Nitrogen, Combustion (10%)	0486	10.02	0.0200	9.977	0.1250	0.0785	62	0.34	0%	0
010.60	Total Nitrogen, Combustion (10%)	0483	10.03	0.0100	9.977	0.1250	0.0785	62	0.38	0%	0
010.60	Total Nitrogen, Combustion (10%)	0421	10.03	0.0500	9.977	0.1250	0.0785	62	0.38	0%	0
010.60	Total Nitrogen, Combustion (10%)	0072	10.03	0.0200	9.977	0.1250	0.0785	62	0.42	0%	0
010.60	Total Nitrogen, Combustion (10%)	0494	10.04	0.0840	9.977	0.1250	0.0785	62	0.49	0%	0
010.60	Total Nitrogen, Combustion (10%)	0292	10.05	0.0100	9.977	0.1250	0.0785	62	0.54	0%	0
010.60	Total Nitrogen, Combustion (10%)	0325	10.05	0.1000	9.977	0.1250	0.0785	62	0.58	0%	0
010.60	Total Nitrogen, Combustion (10%)	0452	10.05	0.0600	9.977	0.1250	0.0785	62	0.58	0%	0
010.60	Total Nitrogen, Combustion (10%)	0102	10.06	0.2300	9.977	0.1250	0.0785	62	0.62	0%	0
010.60	Total Nitrogen, Combustion (10%)	0402	10.08	0.0400	9.977	0.1250	0.0785	62	0.82	1%	0
010.60	Total Nitrogen, Combustion (10%)	0307	10.09	0.0730	9.977	0.1250	0.0785	62	0.91	1%	0
010.60	Total Nitrogen, Combustion (10%)	0117	10.10	0.0000	9.977	0.1250	0.0785	62	0.98	1%	0
010.60	Total Nitrogen, Combustion (10%)	0360	10.12	0.0900	9.977	0.1250	0.0785	62	1.10	1%	0
010.60	Total Nitrogen, Combustion (10%)	0029	10.12	0.3600	9.977	0.1250	0.0785	62	1.14	1%	0
010.60	Total Nitrogen, Combustion (10%)	0034	10.15	0.0700	9.977	0.1250	0.0785	62	1.34	1%	0
010.60	Total Nitrogen, Combustion (10%)	0055	10.15	0.0100	9.977	0.1250	0.0785	62	1.34	1%	0
010.60	Total Nitrogen, Combustion (10%)	0040	10.15	0.3000	9.977	0.1250	0.0785	62	1.38	1%	0
010.60	Total Nitrogen, Combustion (10%)	0444	10.18	0.1700	9.977	0.1250	0.0785	62	1.58	1%	0
010.60	Total Nitrogen, Combustion (10%)	0389	10.19	0.1000	9.977	0.1250	0.0785	62	1.70	1%	0
010.60	Total Nitrogen, Combustion (10%)	0073	10.26	0.0500	9.977	0.1250	0.0785	62	2.22	1%	0
010.60	Total Nitrogen, Combustion (10%)	0230	10.30	0.0000	9.977	0.1250	0.0785	62	2.58	2%	0
010.60	Total Nitrogen, Combustion (10%)	0443	10.35	0.1000	9.977	0.1250	0.0785	62	2.98	2%	0
010.60	Total Nitrogen, Combustion (10%)	0086	9.864	0.5060	9.977	0.1250	0.0785	62	-0.90	1%	1
010.99	Total Nitrogen, Other (10%)	0487	9.700	0.0000	9.994	0.2201	0.1575	4	-1.33	1%	0
010.99	Total Nitrogen, Other (10%)	0394	9.995	0.2500	9.994	0.2201	0.1575	4	0.01	0%	0
010.99	Total Nitrogen, Other (10%)	0506	10.05	0.1000	9.994	0.2201	0.1575	4	0.26	0%	0
010.99	Total Nitrogen, Other (10%)	0420	10.23	0.2800	9.994	0.2201	0.1575	4	1.07	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0500	9.810	0.0200	10.04	0.0300	0.0350	6	-7.59	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0513	9.880	0.0400	10.04	0.0300	0.0350	6	-5.26	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0444	10.04	0.0200	10.04	0.0300	0.0350	6	0.07	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0157	10.05	0.1000	10.04	0.0300	0.0350	6	0.40	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0211	10.06	0.0100	10.04	0.0300	0.0350	6	0.57	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0090	10.07	0.0200	10.04	0.0300	0.0350	6	1.07	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0027	9.412	0.0940	10.01	0.1735	0.0933	17	-3.45	3%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0457	9.720	0.2400	10.01	0.1735	0.0933	17	-1.67	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0428	9.782	0.0544	10.01	0.1735	0.0933	17	-1.32	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	9.815	0.2900	10.01	0.1735	0.0933	17	-1.13	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	9.925	0.0100	10.01	0.1735	0.0933	17	-0.49	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	9.950	0.0400	10.01	0.1735	0.0933	17	-0.35	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0371	9.960	0.0800	10.01	0.1735	0.0933	17	-0.29	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
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020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	9.965	0.0300	10.01	0.1735	0.0933	17	-0.26	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0420	10.04	0.1800	10.01	0.1735	0.0933	17	0.17	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	10.05	0.1200	10.01	0.1735	0.0933	17	0.23	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0394	10.11	0.0480	10.01	0.1735	0.0933	17	0.56	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0481	10.12	0.0300	10.01	0.1735	0.0933	17	0.60	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0406	10.14	0.0400	10.01	0.1735	0.0933	17	0.75	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0416	10.17	0.0000	10.01	0.1735	0.0933	17	0.92	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	10.19	0.1000	10.01	0.1735	0.0933	17	1.04	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0169	10.20	0.0300	10.01	0.1735	0.0933	17	1.06	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	10.20	0.2000	10.01	0.1735	0.0933	17	1.09	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0506	10.35	0.5000	10.01	0.1735	0.0933	17	1.96	2%	1
020.40	Total Phosphorus as P2O5, Automated (%)	0035	9.880	0.0200	9.932	0.0454	0.2167	3	-1.14	0%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0042	9.950	0.5000	9.932	0.0454	0.2167	3	0.40	0%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0096	9.965	0.1300	9.932	0.0454	0.2167	3	0.73	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0307	9.167	0.9190	10.07	0.5012	0.2339	15	-1.80	4%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	9.585	0.0300	10.07	0.5012	0.2339	15	-0.97	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	9.600	0.0800	10.07	0.5012	0.2339	15	-0.94	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	9.695	0.0700	10.07	0.5012	0.2339	15	-0.75	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	9.870	0.0800	10.07	0.5012	0.2339	15	-0.40	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0291	9.935	0.0100	10.07	0.5012	0.2339	15	-0.27	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0368	9.941	0.0188	10.07	0.5012	0.2339	15	-0.26	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	10.01	0.1900	10.07	0.5012	0.2339	15	-0.13	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0157	10.04	0.1300	10.07	0.5012	0.2339	15	-0.07	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0402	10.13	0.2700	10.07	0.5012	0.2339	15	0.11	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0423	10.25	0.0400	10.07	0.5012	0.2339	15	0.36	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	10.61	0.3700	10.07	0.5012	0.2339	15	1.07	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	11.09	0.1400	10.07	0.5012	0.2339	15	2.04	5%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0422	11.12	0.7600	10.07	0.5012	0.2339	15	2.10	5%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0260	19.30	0.4000	10.07	0.5012	0.2339	15	18.42	46%	0
020.99	Total Phosphorus as P2O5, Other (%)	0487	9.870	0.0400	9.977	0.1290	0.0400	3	-0.83	1%	0
020.99	Total Phosphorus as P2O5, Other (%)	0513	9.940	0.0400	9.977	0.1290	0.0400	3	-0.28	0%	0
020.99	Total Phosphorus as P2O5, Other (%)	0443	10.12	0.0400	9.977	0.1290	0.0400	3	1.11	1%	0
030.20	Citrate Insoluble Phosphorus as P2O5, Spectro... (%)	0405	0.0800	0.0000			0.0000	1			0
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	0.0850	0.0500			0.0500	1			0
040.40	Indirect Available Phosphorus as P2O5, Automa... (10%)	0096	9.885	0.0900			0.0900	1			0
040.50	Indirect Available Phosphorus as P2O5, ICP (10%)	0072	9.925	0.2700			0.2700	1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0102	9.700	0.0000	9.926	0.1529	0.0657	8	-1.48	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0072	9.830	0.1000	9.926	0.1529	0.0657	8	-0.63	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0177	9.832	0.0091	9.926	0.1529	0.0657	8	-0.62	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0086	9.903	0.0363	9.926	0.1529	0.0657	8	-0.15	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0040	9.950	0.1000	9.926	0.1529	0.0657	8	0.16	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0105	10.03	0.0400	9.926	0.1529	0.0657	8	0.68	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0049	10.07	0.0300	9.926	0.1529	0.0657	8	0.91	1%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
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041.10	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0494	10.10	0.2100	9.926	0.1529	0.0657	8	1.11	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0513	9.685	0.0500	9.772	0.0875	0.0833	3	-0.99	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0485	9.770	0.0200	9.772	0.0875	0.0833	3	-0.02	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (10%)	0055	9.860	0.1800	9.772	0.0875	0.0833	3	1.01	0%	0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (10%)	0027	9.384	0.2920	9.642	0.3649	0.1460	2	-0.71	1%	0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (10%)	0498	9.900	0.0000	9.642	0.3649	0.1460	2	0.71	1%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (10%)	0200	9.860	0.0200	9.958	0.1379	0.0450	2	-0.71	0%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (10%)	0055	10.06	0.0700	9.958	0.1379	0.0450	2	0.71	0%	0
041.31	Direct Available Phosphorus as P2O5, Alkalime... (10%)	0220	9.740	0.1200			0.1200	1			0
041.40	Direct Available Phosphorus as P2O5, Automate... (10%)	0095	9.485	0.1100	9.910	0.6010	0.0700	2	-0.71	2%	0
041.40	Direct Available Phosphorus as P2O5, Automate... (10%)	0131	10.34	0.0300	9.910	0.6010	0.0700	2	0.71	2%	0
041.50	Direct Available Phosphorus as P2O5, ICP (10%)	0368	9.371	0.3437	9.664	0.4542	0.2284	4	-0.65	2%	0
041.50	Direct Available Phosphorus as P2O5, ICP (10%)	0325	9.400	0.4000	9.664	0.4542	0.2284	4	-0.58	1%	0
041.50	Direct Available Phosphorus as P2O5, ICP (10%)	0007	9.550	0.1000	9.664	0.4542	0.2284	4	-0.25	1%	0
041.50	Direct Available Phosphorus as P2O5, ICP (10%)	0452	10.34	0.0700	9.664	0.4542	0.2284	4	1.48	3%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (10%)	0137	9.017*	0.0480	9.809	0.4220	0.0396	8	-1.88	4%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (10%)	0486	9.475	0.0100	9.809	0.4220	0.0396	8	-0.79	2%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (10%)	0423	9.610	0.0400	9.809	0.4220	0.0396	8	-0.47	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (10%)	0023	9.810	0.0200	9.809	0.4220	0.0396	8	0.00	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (10%)	0377	9.825	0.0500	9.809	0.4220	0.0396	8	0.04	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (10%)	0025	9.981	0.0490	9.809	0.4220	0.0396	8	0.41	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (10%)	0360	10.14	0.0500	9.809	0.4220	0.0396	8	0.77	2%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (10%)	0421	10.46	0.0500	9.809	0.4220	0.0396	8	1.53	3%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0397	9.367	0.1758	9.745	0.1682	0.1162	12	-2.25	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0073	9.495	0.1100	9.745	0.1682	0.1162	12	-1.49	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0472	9.685	0.1100	9.745	0.1682	0.1162	12	-0.36	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0177	9.693	0.0279	9.745	0.1682	0.1162	12	-0.31	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0029	9.705	0.0500	9.745	0.1682	0.1162	12	-0.24	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0043	9.715	0.0300	9.745	0.1682	0.1162	12	-0.18	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0037	9.725	0.0300	9.745	0.1682	0.1162	12	-0.12	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0034	9.735	0.0520	9.745	0.1682	0.1162	12	-0.06	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0105	9.875	0.3700	9.745	0.1682	0.1162	12	0.77	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0136	9.965	0.0500	9.745	0.1682	0.1162	12	1.31	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0354	10.02	0.1490	9.745	0.1682	0.1162	12	1.61	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (10%)	0231	10.71	0.2400	9.745	0.1682	0.1162	12	5.73	5%	0
041.99	Direct Available Phosphorus as P2O5, Other (10%)	0513	9.610	0.0200	9.755	0.1383	0.1250	4	-1.05	1%	0
041.99	Direct Available Phosphorus as P2O5, Other (10%)	0230	9.665	0.1300	9.755	0.1383	0.1250	4	-0.65	0%	0
041.99	Direct Available Phosphorus as P2O5, Other (10%)	0506	9.855	0.0900	9.755	0.1383	0.1250	4	0.72	1%	0
041.99	Direct Available Phosphorus as P2O5, Other (10%)	0105	9.890	0.2600	9.755	0.1383	0.1250	4	0.98	1%	0
048.10	Water Soluble Phosphorus as P2O5, Gravimetric... (%)	0513	8.100	0.0400			0.0400	1			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0394	8.140	0.1100	8.205	0.0919	0.0850	2	-0.71	0%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0420	8.270	0.0600	8.205	0.0919	0.0850	2	0.71	0%	0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	8.100	0.0800			0.0800	1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
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048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0444	8.240	0.0200	9.183	1.333	0.0150	2	-0.71	5%	0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0501	10.13	0.0100	9.183	1.333	0.0150	2	0.71	5%	0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0513	8.230	0.0600			0.0600	1			0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0220	9.410*	0.0400	10.32	0.1819	0.0800	12	-4.98	4%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0072	10.07	0.0100	10.32	0.1819	0.0800	12	-1.38	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0211	10.20	0.1000	10.32	0.1819	0.0800	12	-0.63	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0114	10.25	0.1200	10.32	0.1819	0.0800	12	-0.36	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0231	10.27	0.1000	10.32	0.1819	0.0800	12	-0.25	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0102	10.30	0.0000	10.32	0.1819	0.0800	12	-0.09	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0494	10.31	0.1900	10.32	0.1819	0.0800	12	-0.06	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0405	10.32	0.1100	10.32	0.1819	0.0800	12	0.00	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0416	10.41	0.0500	10.32	0.1819	0.0800	12	0.49	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0049	10.57	0.1800	10.32	0.1819	0.0800	12	1.40	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0055	10.64	0.0300	10.32	0.1819	0.0800	12	1.76	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0090	10.99	0.0300	10.32	0.1819	0.0800	12	3.68	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0230	11.00	0.8000	10.32	0.1819	0.0800	12	3.76	3%	1
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0136	9.890	0.0600	10.43	0.5755	0.1233	7	-0.93	3%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0157	9.995	0.0100	10.43	0.5755	0.1233	7	-0.75	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0356	10.04	0.2400	10.43	0.5755	0.1233	7	-0.67	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0498	10.35	0.1000	10.43	0.5755	0.1233	7	-0.13	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0040	10.50	0.2000	10.43	0.5755	0.1233	7	0.13	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0428	11.06	0.0829	10.43	0.5755	0.1233	7	1.10	3%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0073	12.18	0.1700	10.43	0.5755	0.1233	7	3.04	8%	0
050.31	Soluble Potassium as K2O, AA (Citrate) (10%)	0472	9.935	0.1100			0.1100	1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0402	9.425*	0.0100	10.35	0.3574	0.1762	10	-2.59	4%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0444	9.925	0.0100	10.35	0.3574	0.1762	10	-1.19	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0055	9.965	0.0100	10.35	0.3574	0.1762	10	-1.08	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0292	10.13	0.0400	10.35	0.3574	0.1762	10	-0.62	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0157	10.45	0.1000	10.35	0.3574	0.1762	10	0.28	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0397	10.49	0.1546	10.35	0.3574	0.1762	10	0.39	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0406	10.51	0.3100	10.35	0.3574	0.1762	10	0.43	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0324	10.65	0.5000	10.35	0.3574	0.1762	10	0.84	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0420	10.68	0.1330	10.35	0.3574	0.1762	10	0.92	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0086	10.72	0.4948	10.35	0.3574	0.1762	10	1.03	2%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0007	10.35	0.3000	10.49	0.1222	0.2700	5	-1.14	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0483	10.39	0.9700	10.49	0.1222	0.2700	5	-0.85	0%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0291	10.50	0.0100	10.49	0.1222	0.2700	5	0.05	0%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0072	10.58	0.0400	10.49	0.1222	0.2700	5	0.74	0%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0452	10.64	0.0300	10.49	0.1222	0.2700	5	1.19	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0486	9.560	0.1000	10.45	0.2053	0.0985	10	-4.32	4%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0485	9.605	0.3500	10.45	0.2053	0.0985	10	-4.10	4%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0137	10.24	0.0600	10.45	0.2053	0.0985	10	-1.00	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0025	10.37	0.0060	10.45	0.2053	0.0985	10	-0.37	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0423	10.47	0.0600	10.45	0.2053	0.0985	10	0.12	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0377	10.49	0.0200	10.45	0.2053	0.0985	10	0.21	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0421	10.52	0.0500	10.45	0.2053	0.0985	10	0.34	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0023	10.59	0.0400	10.45	0.2053	0.0985	10	0.70	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0354	10.61	0.0890	10.45	0.2053	0.0985	10	0.78	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0360	10.75	0.2100	10.45	0.2053	0.0985	10	1.46	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0510	9.770	0.0800	10.17	0.3091	0.0400	5	-1.28	2%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0200	9.965	0.0100	10.17	0.3091	0.0400	5	-0.65	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0309	10.21	0.0600	10.17	0.3091	0.0400	5	0.14	0%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0169	10.32	0.0200	10.17	0.3091	0.0400	5	0.50	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0443	10.57	0.0300	10.17	0.3091	0.0400	5	1.29	2%	0
050.61	Soluble Potassium as K2O, Flame Photometric (... (10%)	0035	10.21	0.2200	10.39	0.2510	0.1150	2	-0.71	1%	0
050.61	Soluble Potassium as K2O, Flame Photometric (... (10%)	0131	10.57	0.0100	10.39	0.2510	0.1150	2	0.71	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0095	10.05	0.2400	10.27	0.1534	0.1344	5	-1.41	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0034	10.20	0.0720	10.27	0.1534	0.1344	5	-0.42	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0037	10.30	0.0100	10.27	0.1534	0.1344	5	0.19	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0105	10.32	0.1000	10.27	0.1534	0.1344	5	0.35	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0029	10.47	0.2500	10.27	0.1534	0.1344	5	1.29	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0501	9.410*	0.1000	10.13	0.4538	0.1578	24	-1.59	4%	0
050.99	Soluble Potassium as K2O, Other (10%)	0422	9.480*	0.4000	10.13	0.4538	0.1578	24	-1.43	3%	0
050.99	Soluble Potassium as K2O, Other (10%)	0513	9.710	0.0800	10.13	0.4538	0.1578	24	-0.93	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0096	9.715	0.0900	10.13	0.4538	0.1578	24	-0.92	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0027	9.732	0.1500	10.13	0.4538	0.1578	24	-0.88	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0500	9.800	0.0200	10.13	0.4538	0.1578	24	-0.73	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0482	9.810	0.0400	10.13	0.4538	0.1578	24	-0.71	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0481	9.855	0.0900	10.13	0.4538	0.1578	24	-0.61	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0043	9.900	0.1800	10.13	0.4538	0.1578	24	-0.51	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0394	10.00	0.0390	10.13	0.4538	0.1578	24	-0.29	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0042	10.05	0.1000	10.13	0.4538	0.1578	24	-0.18	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0325	10.05	0.1000	10.13	0.4538	0.1578	24	-0.18	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0444	10.18	0.1700	10.13	0.4538	0.1578	24	0.10	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0307	10.19	0.5930	10.13	0.4538	0.1578	24	0.14	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0506	10.22	0.5600	10.13	0.4538	0.1578	24	0.20	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0457	10.23	0.0400	10.13	0.4538	0.1578	24	0.22	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0105	10.37	0.0100	10.13	0.4538	0.1578	24	0.52	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0275	10.52	0.0800	10.13	0.4538	0.1578	24	0.86	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0177	10.54	0.1765	10.13	0.4538	0.1578	24	0.91	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0234	10.57	0.1100	10.13	0.4538	0.1578	24	0.96	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0487	10.57	0.0200	10.13	0.4538	0.1578	24	0.97	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0389	10.59	0.2700	10.13	0.4538	0.1578	24	1.00	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0368	11.00	0.2993	10.13	0.4538	0.1578	24	1.91	4%	0
050.99	Soluble Potassium as K2O, Other (10%)	0451	11.57	0.0700	10.13	0.4538	0.1578	24	3.16	7%	0
050.99	Soluble Potassium as K2O, Other (10%)	0260	20.98	0.0800	10.13	0.4538	0.1578	24	23.90	54%	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				
060.00	Water (Free), Vacuum Oven (%)	0007	0.2300	0.0200	0.4315	0.2455	0.0398	3	-0.82	23%	0
060.00	Water (Free), Vacuum Oven (%)	0416	0.3596	0.0093	0.4315	0.2455	0.0398	3	-0.29	8%	0
060.00	Water (Free), Vacuum Oven (%)	0096	0.7050	0.0900	0.4315	0.2455	0.0398	3	1.11	32%	0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 h... (%)	0055	0.6000	0.0000	0.8575	0.3642	0.0150	2	-0.71	15%	0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 h... (%)	0513	1.115	0.0300	0.8575	0.3642	0.0150	2	0.71	15%	0
060.99	Water (Free), Other (%)	0510	0.2950	0.0100	0.5700	0.3889	0.0300	2	-0.71	24%	0
060.99	Water (Free), Other (%)	0513	0.8450	0.0500	0.5700	0.3889	0.0300	2	0.71	24%	0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0457	6.706	0.1900			0.1900	1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0041	6.565	0.0100	7.035	0.3348	0.1299	10	-1.40	3%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	6.832	0.0310	7.035	0.3348	0.1299	10	-0.61	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0307	6.837	0.1880	7.035	0.3348	0.1299	10	-0.59	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	6.840	0.0800	7.035	0.3348	0.1299	10	-0.58	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0102	6.853	0.0380	7.035	0.3348	0.1299	10	-0.54	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0035	7.025	0.5100	7.035	0.3348	0.1299	10	-0.03	0%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0420	7.264	0.0524	7.035	0.3348	0.1299	10	0.69	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	7.300	0.3400	7.035	0.3348	0.1299	10	0.79	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0472	7.410	0.0200	7.035	0.3348	0.1299	10	1.12	3%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0131	7.505	0.0300	7.035	0.3348	0.1299	10	1.41	3%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	8.900	1.000	7.035	0.3348	0.1299	10	5.57	13%	1
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0423	7.655	0.1100			0.1100	1			0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0494	6.562	0.0063	7.077	0.4534	0.1134	3	-1.14	4%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0025	7.255	0.2840	7.077	0.4534	0.1134	3	0.39	1%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0421	7.415	0.0500	7.077	0.4534	0.1134	3	0.74	2%	0
101.99	Acid Soluble Calcium, Other (%)	0501	5.885	0.2700	6.500	0.8697	0.2100	2	-0.71	5%	0
101.99	Acid Soluble Calcium, Other (%)	0389	7.115	0.1500	6.500	0.8697	0.2100	2	0.71	5%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0029	0.9968	0.0605	1.085	0.0495	0.0517	9	-1.79	4%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0457	1.048	0.0220	1.085	0.0495	0.0517	9	-0.75	2%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0043	1.055	0.0040	1.085	0.0495	0.0517	9	-0.61	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0485	1.070	0.0090	1.085	0.0495	0.0517	9	-0.32	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0040	1.075	0.0100	1.085	0.0495	0.0517	9	-0.21	0%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0481	1.100	0.0000	1.085	0.0495	0.0517	9	0.30	1%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0157	1.160	0.1200	1.085	0.0495	0.0517	9	1.51	3%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0169	1.200	0.0400	1.085	0.0495	0.0517	9	2.32	5%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (1.2%)	0309	1.640	0.2000	1.085	0.0495	0.0517	9	11.20	26%	0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (1.2%)	0117	1.085	0.0500			0.0500	1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0230	0.8230	0.0220	1.053	0.0752	0.0203	26	-3.06	11%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0433	0.9458	0.0013	1.053	0.0752	0.0203	26	-1.43	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0291	0.9550	0.0100	1.053	0.0752	0.0203	26	-1.30	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0482	0.9750	0.0100	1.053	0.0752	0.0203	26	-1.04	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0041	0.9950	0.0500	1.053	0.0752	0.0203	26	-0.77	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0102	0.9990	0.0040	1.053	0.0752	0.0203	26	-0.72	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0095	1.000	0.0600	1.053	0.0752	0.0203	26	-0.71	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0444	1.010	0.0600	1.053	0.0752	0.0203	26	-0.57	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				
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0090	1.015	0.0100	1.053	0.0752	0.0203	26	-0.51	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0055	1.030	0.0200	1.053	0.0752	0.0203	26	-0.31	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0234	1.035	0.0100	1.053	0.0752	0.0203	26	-0.24	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0157	1.040	0.0000	1.053	0.0752	0.0203	26	-0.17	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0307	1.050	0.0050	1.053	0.0752	0.0203	26	-0.05	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0096	1.050	0.0000	1.053	0.0752	0.0203	26	-0.04	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0131	1.065	0.0500	1.053	0.0752	0.0203	26	0.16	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0420	1.075	0.0008	1.053	0.0752	0.0203	26	0.30	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0368	1.076	0.0005	1.053	0.0752	0.0203	26	0.30	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0220	1.080	0.0200	1.053	0.0752	0.0203	26	0.36	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0360	1.080	0.0000	1.053	0.0752	0.0203	26	0.36	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0354	1.108	0.0140	1.053	0.0752	0.0203	26	0.73	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0371	1.108	0.0000	1.053	0.0752	0.0203	26	0.73	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0114	1.130	0.0000	1.053	0.0752	0.0203	26	1.02	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0452	1.135	0.0100	1.053	0.0752	0.0203	26	1.09	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0231	1.165	0.1100	1.053	0.0752	0.0203	26	1.49	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0472	1.195	0.0100	1.053	0.0752	0.0203	26	1.89	7%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0483	1.205	0.0500	1.053	0.0752	0.0203	26	2.02	7%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (1.2%)	0035	1.100	0.1200	1.053	0.0752	0.0203	26	0.62	2%	1
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0394	0.9350	0.0100	0.9850	0.0707	0.0200	2	-0.71	3%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0423	1.035	0.0300	0.9850	0.0707	0.0200	2	0.71	3%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0515	0.9436	0.0313	1.051	0.0859	0.0333	10	-1.25	5%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0072	0.9650	0.0100	1.051	0.0859	0.0333	10	-1.00	4%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0397	0.9827	0.0613	1.051	0.0859	0.0333	10	-0.80	3%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0494	1.017	0.0011	1.051	0.0859	0.0333	10	-0.40	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0177	1.040	0.0034	1.051	0.0859	0.0333	10	-0.13	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0025	1.080	0.0920	1.051	0.0859	0.0333	10	0.34	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0037	1.080	0.0200	1.051	0.0859	0.0333	10	0.34	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0023	1.088	0.0040	1.051	0.0859	0.0333	10	0.43	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0421	1.135	0.0500	1.051	0.0859	0.0333	10	0.98	4%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0486	1.270	0.0600	1.051	0.0859	0.0333	10	2.55	10%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (1.2%)	0422	1.070	0.2600	1.051	0.0859	0.0333	10	0.22	1%	1
121.99	Acid Soluble Magnesium, Other (1.2%)	0515	0.9080	0.0378	1.163	0.2270	0.0429	9	-1.12	11%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0501	0.9600	0.0000	1.163	0.2270	0.0429	9	-0.90	9%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0506	1.015	0.0100	1.163	0.2270	0.0429	9	-0.65	6%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0389	1.098	0.0060	1.163	0.2270	0.0429	9	-0.29	3%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0508	1.155	0.0700	1.163	0.2270	0.0429	9	-0.04	0%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0200	1.175	0.0100	1.163	0.2270	0.0429	9	0.05	1%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0042	1.225	0.0300	1.163	0.2270	0.0429	9	0.27	3%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0512	2.017	0.1420	1.163	0.2270	0.0429	9	3.76	37%	0
121.99	Acid Soluble Magnesium, Other (1.2%)	0260	2.840	0.0800	1.163	0.2270	0.0429	9	7.39	72%	0
131.00	Water Soluble Magnesium, AA (%)	0029	0.7753	0.0755	0.9159	0.0993	0.0455	5	-1.42	8%	0
131.00	Water Soluble Magnesium, AA (%)	0027	0.9030	0.0460	0.9159	0.0993	0.0455	5	-0.13	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				
131.00	Water Soluble Magnesium, AA (%)	0485	0.9210	0.0060	0.9159	0.0993	0.0455	5	0.05	0%	0
131.00	Water Soluble Magnesium, AA (%)	0309	0.9250	0.0900	0.9159	0.0993	0.0455	5	0.09	0%	0
131.00	Water Soluble Magnesium, AA (%)	0498	1.055	0.0100	0.9159	0.0993	0.0455	5	1.40	8%	0
131.30	Water Soluble Magnesium, ICP (%)	0444	0.7300	0.0600	0.9342	0.1160	0.0250	7	-1.76	11%	0
131.30	Water Soluble Magnesium, ICP (%)	0394	0.7900	0.0200	0.9342	0.1160	0.0250	7	-1.24	8%	0
131.30	Water Soluble Magnesium, ICP (%)	0220	0.8950	0.0100	0.9342	0.1160	0.0250	7	-0.34	2%	0
131.30	Water Soluble Magnesium, ICP (%)	0275	0.9600	0.0000	0.9342	0.1160	0.0250	7	0.22	1%	0
131.30	Water Soluble Magnesium, ICP (%)	0368	0.9743	0.0252	0.9342	0.1160	0.0250	7	0.35	2%	0
131.30	Water Soluble Magnesium, ICP (%)	0230	0.9750	0.0300	0.9342	0.1160	0.0250	7	0.35	2%	0
131.30	Water Soluble Magnesium, ICP (%)	0501	1.165	0.0300	0.9342	0.1160	0.0250	7	1.99	12%	0
131.30	Water Soluble Magnesium, ICP (%)	0027	1.228	0.1730	0.9342	0.1160	0.0250	7	2.53	16%	1
131.70	Water Soluble Magnesium, Titrimetric (EDTA) (%)	0510	1.175	0.1100			0.1100	1			0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0485	0.7560	0.2480	1.253	0.3462	0.1995	4	-1.43	20%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0220	1.305	0.0300	1.253	0.3462	0.1995	4	0.15	2%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0095	1.400	0.4200	1.253	0.3462	0.1995	4	0.43	6%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0510	1.550	0.1000	1.253	0.3462	0.1995	4	0.86	12%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0055	12.03	0.0600	1.253	0.3462	0.1995	4	31.13	430%	3
143.99	Elemental Sulfur, Other (%)	0027	1.390	0.0400	1.253	0.3462	0.0400	1	0.40	5%	0
143.99	Elemental Sulfur, Other (%)	0291	10.33	0.0100	1.253	0.3462	0.0400	1	26.21	362%	3
143.99	Elemental Sulfur, Other (%)	0472	12.42	0.0400	1.253	0.3462	0.0400	1	32.26	446%	3
143.99	Elemental Sulfur, Other (%)	0389	13.03	0.0900	1.253	0.3462	0.0400	1	34.01	470%	3
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0444	10.75	0.2200	11.33	0.2066	0.0915	9	-2.79	3%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0405	10.86	0.0800	11.33	0.2066	0.0915	9	-2.26	2%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0027	11.22	0.1400	11.33	0.2066	0.0915	9	-0.51	0%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0485	11.33	0.0600	11.33	0.2066	0.0915	9	0.02	0%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0397	11.33	0.1933	11.33	0.2066	0.0915	9	0.03	0%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0510	11.36	0.0100	11.33	0.2066	0.0915	9	0.14	0%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0095	11.37	0.0300	11.33	0.2066	0.0915	9	0.19	0%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0220	11.91	0.0400	11.33	0.2066	0.0915	9	2.83	3%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0043	12.98	0.0500	11.33	0.2066	0.0915	9	7.98	7%	0
147.99	Total Sulfur in Urea/Formulations, Other (Ide... (%)	0131	12.25	0.0700			0.0700	1			0
148.00	Total Sulfur, Combustion (10%)	0157	11.65	0.3000	12.22	0.3752	0.2920	5	-1.51	2%	0
148.00	Total Sulfur, Combustion (10%)	0360	12.18	0.3500	12.22	0.3752	0.2920	5	-0.11	0%	0
148.00	Total Sulfur, Combustion (10%)	0451	12.20	0.4000	12.22	0.3752	0.2920	5	-0.05	0%	0
148.00	Total Sulfur, Combustion (10%)	0025	12.39	0.0600	12.22	0.3752	0.2920	5	0.46	1%	0
148.00	Total Sulfur, Combustion (10%)	0029	12.68	0.3500	12.22	0.3752	0.2920	5	1.22	2%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0498	10.90*	0.0000	12.16	0.7810	0.1562	15	-1.61	5%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0444	11.07*	0.1900	12.16	0.7810	0.1562	15	-1.40	4%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0102	11.30	0.0130	12.16	0.7810	0.1562	15	-1.10	4%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0324	11.40	0.0000	12.16	0.7810	0.1562	15	-0.97	3%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0230	11.85	0.1000	12.16	0.7810	0.1562	15	-0.39	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0114	12.03	0.3300	12.16	0.7810	0.1562	15	-0.17	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0485	12.09	0.3000	12.16	0.7810	0.1562	15	-0.09	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				
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0040	12.25	0.3000	12.16	0.7810	0.1562	15	0.12	0%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0481	12.34	0.2000	12.16	0.7810	0.1562	15	0.23	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0029	12.40	0.0300	12.16	0.7810	0.1562	15	0.31	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0157	12.70	0.0000	12.16	0.7810	0.1562	15	0.70	2%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0095	12.77	0.4500	12.16	0.7810	0.1562	15	0.78	3%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0457	12.91	0.3100	12.16	0.7810	0.1562	15	0.96	3%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0510	12.91	0.1100	12.16	0.7810	0.1562	15	0.96	3%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0220	13.22	0.0100	12.16	0.7810	0.1562	15	1.36	4%	0
148.04	Total Sulfur, ICP, w/Br digestion (10%)	0394	10.85*	0.1000			0.1000	1			0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0515	9.302*	0.1693	12.23	0.9113	0.1641	11	-3.21	12%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0444	10.13*	0.2300	12.23	0.9113	0.1641	11	-2.31	9%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0486	10.42*	0.3000	12.23	0.9113	0.1641	11	-1.99	7%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0421	11.91	0.0500	12.23	0.9113	0.1641	11	-0.36	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0023	12.11	0.2010	12.23	0.9113	0.1641	11	-0.14	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0037	12.50	0.3000	12.23	0.9113	0.1641	11	0.30	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0494	12.52	0.1083	12.23	0.9113	0.1641	11	0.32	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0102	12.61	0.1730	12.23	0.9113	0.1641	11	0.42	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0177	12.66	0.0030	12.23	0.9113	0.1641	11	0.47	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0483	13.35	0.1000	12.23	0.9113	0.1641	11	1.23	5%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0292	13.36	0.1700	12.23	0.9113	0.1641	11	1.23	5%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0406	10.39*	2.430	12.23	0.9113	0.1641	11	-2.03	8%	1
148.99	Total Sulfur, Other (10%)	0501	9.965*	0.0100	11.34	1.209	0.3313	10	-1.13	6%	0
148.99	Total Sulfur, Other (10%)	0422	10.37*	1.080	11.34	1.209	0.3313	10	-0.80	4%	0
148.99	Total Sulfur, Other (10%)	0506	10.45*	0.7000	11.34	1.209	0.3313	10	-0.73	4%	0
148.99	Total Sulfur, Other (10%)	0354	10.63*	0.0490	11.34	1.209	0.3313	10	-0.59	3%	0
148.99	Total Sulfur, Other (10%)	0096	10.87*	0.4400	11.34	1.209	0.3313	10	-0.38	2%	0
148.99	Total Sulfur, Other (10%)	0307	10.93*	0.8140	11.34	1.209	0.3313	10	-0.33	2%	0
148.99	Total Sulfur, Other (10%)	0482	12.70	0.0000	11.34	1.209	0.3313	10	1.13	6%	0
148.99	Total Sulfur, Other (10%)	0452	12.91	0.0500	11.34	1.209	0.3313	10	1.30	7%	0
148.99	Total Sulfur, Other (10%)	0072	13.72	0.0400	11.34	1.209	0.3313	10	1.97	11%	0
148.99	Total Sulfur, Other (10%)	0220	13.76	0.1300	11.34	1.209	0.3313	10	2.00	11%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0501	9.965	0.0100	11.37	1.260	0.1464	3	-1.11	6%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0368	11.74	0.0291	11.37	1.260	0.1464	3	0.30	2%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0423	12.40	0.4000	11.37	1.260	0.1464	3	0.82	5%	0
151.00	Acid Soluble Arsenic , AA, test portion as i... (ppm)	0136	2.200	0.2000			0.2000	1			0
151.30	Acid Soluble Arsenic , ICP (ppm)	0102	1.379	0.2500	2.520	0.7508	0.1900	5	-1.52	23%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0096	2.300	0.0000	2.520	0.7508	0.1900	5	-0.29	4%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0230	2.535	0.1300	2.520	0.7508	0.1900	5	0.02	0%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0501	3.190	0.0400	2.520	0.7508	0.1900	5	0.89	13%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0368	3.195	0.5300	2.520	0.7508	0.1900	5	0.90	13%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0095	5.000	2.000	2.520	0.7508	0.1900	5	3.30	49%	1
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified... (ppm)	0515	0.6573	0.4318	2.510	1.647	0.4360	3	-1.12	37%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified... (ppm)	0037	3.065	0.2100	2.510	1.647	0.4360	3	0.34	11%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified... (ppm)	0494	3.807	0.6662	2.510	1.647	0.4360	3	0.79	26%	0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	0.6190	1.238			1.238	0			4
165.00	Acid Soluble Boron , Spectrophotometric (0.06%)	0055	0.0280	0.0000	0.0322	0.0046	0.0004	5	-0.91	7%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.06%)	0481	0.0300	0.0000	0.0322	0.0046	0.0004	5	-0.48	3%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.06%)	0029	0.0310	0.0000	0.0322	0.0046	0.0004	5	-0.26	2%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.06%)	0220	0.0320	0.0020	0.0322	0.0046	0.0004	5	-0.04	0%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.06%)	0506	0.0400	0.0000	0.0322	0.0046	0.0004	5	1.69	12%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.06%)	0037	0.0315	0.0090	0.0322	0.0046	0.0004	5	-0.15	1%	1
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0234	0.0200*	0.0000	0.0288	0.0036	0.0015	10	-2.45	15%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0354	0.0265	0.0010	0.0288	0.0036	0.0015	10	-0.65	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0394	0.0265	0.0010	0.0288	0.0036	0.0015	10	-0.65	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0485	0.0265	0.0050	0.0288	0.0036	0.0015	10	-0.65	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0444	0.0270	0.0040	0.0288	0.0036	0.0015	10	-0.51	3%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0494	0.0302	0.0002	0.0288	0.0036	0.0015	10	0.38	2%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0433	0.0309	0.0002	0.0288	0.0036	0.0015	10	0.57	4%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0397	0.0316	0.0003	0.0288	0.0036	0.0015	10	0.75	5%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0389	0.0320	0.0032	0.0288	0.0036	0.0015	10	0.88	5%	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.06%)	0402	0.0600	0.0000	0.0288	0.0036	0.0015	10	8.63	54%	0
165.99	Acid Soluble Boron , Other (0.06%)	0501	0.0205*	0.0030	0.0302	0.0052	0.0018	15	-1.85	16%	0
165.99	Acid Soluble Boron , Other (0.06%)	0230	0.0208*	0.0002	0.0302	0.0052	0.0018	15	-1.79	16%	0
165.99	Acid Soluble Boron , Other (0.06%)	0515	0.0240	0.0006	0.0302	0.0052	0.0018	15	-1.18	10%	0
165.99	Acid Soluble Boron , Other (0.06%)	0423	0.0270	0.0000	0.0302	0.0052	0.0018	15	-0.61	5%	0
165.99	Acid Soluble Boron , Other (0.06%)	0421	0.0275	0.0050	0.0302	0.0052	0.0018	15	-0.51	4%	0
165.99	Acid Soluble Boron , Other (0.06%)	0095	0.0300	0.0000	0.0302	0.0052	0.0018	15	-0.03	0%	0
165.99	Acid Soluble Boron , Other (0.06%)	0291	0.0300	0.0000	0.0302	0.0052	0.0018	15	-0.03	0%	0
165.99	Acid Soluble Boron , Other (0.06%)	0472	0.0300	0.0000	0.0302	0.0052	0.0018	15	-0.03	0%	0
165.99	Acid Soluble Boron , Other (0.06%)	0486	0.0300	0.0000	0.0302	0.0052	0.0018	15	-0.03	0%	0
165.99	Acid Soluble Boron , Other (0.06%)	0360	0.0305	0.0010	0.0302	0.0052	0.0018	15	0.06	1%	0
165.99	Acid Soluble Boron , Other (0.06%)	0231	0.0325	0.0010	0.0302	0.0052	0.0018	15	0.45	4%	0
165.99	Acid Soluble Boron , Other (0.06%)	0482	0.0350	0.0100	0.0302	0.0052	0.0018	15	0.93	8%	0
165.99	Acid Soluble Boron , Other (0.06%)	0043	0.0360	0.0010	0.0302	0.0052	0.0018	15	1.12	10%	0
165.99	Acid Soluble Boron , Other (0.06%)	0200	0.0430	0.0040	0.0302	0.0052	0.0018	15	2.46	21%	0
165.99	Acid Soluble Boron , Other (0.06%)	0042	0.0535	0.0010	0.0302	0.0052	0.0018	15	4.47	39%	0
165.99	Acid Soluble Boron , Other (0.06%)	0483	355.5	5.000	0.0302	0.0052	0.0018	15	68117.57	589177%	2
171.99	Water Soluble Boron , Other (%)	0501	0.0255	0.0070	0.0273	0.0025	0.0035	2	-0.71	3%	0
171.99	Water Soluble Boron , Other (%)	0027	0.0290	0.0000	0.0273	0.0025	0.0035	2	0.71	3%	0
181.00	Acid Soluble Cadmium , AA, test portion as i... (ppm)	0136	1.200	0.2000			0.2000	1			0
181.30	Acid Soluble Cadmium , ICP (ppm)	0368	0.9650	0.2300	1.244	0.2343	0.1338	9	-1.19	11%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0230	1.045	0.0300	1.244	0.2343	0.1338	9	-0.85	8%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0035	1.074	0.4520	1.244	0.2343	0.1338	9	-0.72	7%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0394	1.195	0.0500	1.244	0.2343	0.1338	9	-0.21	2%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0096	1.200	0.2000	1.244	0.2343	0.1338	9	-0.19	2%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0482	1.250	0.1000	1.244	0.2343	0.1338	9	0.03	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				
181.30	Acid Soluble Cadmium , ICP (ppm)	0102	1.399	0.0020	1.244	0.2343	0.1338	9	0.66	6%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0501	1.520	0.0400	1.244	0.2343	0.1338	9	1.18	11%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	1.550	0.1000	1.244	0.2343	0.1338	9	1.31	12%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0095	2.000	2.000	1.244	0.2343	0.1338	9	3.23	30%	1
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0494	1.282	0.0162	1.882	0.9186	0.3477	3	-0.65	16%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0037	1.425	0.0500	1.882	0.9186	0.3477	3	-0.50	12%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified... (ppm)	0515	2.940	0.9770	1.882	0.9186	0.3477	3	1.15	28%	0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000			0.0000	0			4
181.99	Acid Soluble Cadmium , Other (ppm)	0220	1.050	0.1000	1.197	0.1450	0.1133	3	-1.01	6%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0487	1.200	0.2000	1.197	0.1450	0.1133	3	0.02	0%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0481	1.340	0.0400	1.197	0.1450	0.1133	3	0.99	6%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0444	20.50	1.080	26.88	4.205	0.9133	10	-1.52	12%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0394	22.65	0.1000	26.88	4.205	0.9133	10	-1.01	8%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	23.15	0.1000	26.88	4.205	0.9133	10	-0.89	7%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	26.00	2.600	26.88	4.205	0.9133	10	-0.21	2%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0501	27.25	0.4900	26.88	4.205	0.9133	10	0.09	1%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0230	27.50	2.400	26.88	4.205	0.9133	10	0.15	1%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0102	28.68	0.0430	26.88	4.205	0.9133	10	0.43	3%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0368	29.83	1.120	26.88	4.205	0.9133	10	0.70	5%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	30.75	0.5000	26.88	4.205	0.9133	10	0.92	7%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	32.15	0.7000	26.88	4.205	0.9133	10	1.25	10%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0027	25.86	0.5030	31.05	3.577	2.325	4	-1.45	8%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0494	31.53	0.5256	31.05	3.577	2.325	4	0.13	1%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0515	33.16	5.732	31.05	3.577	2.325	4	0.59	3%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modifie... (ppm)	0037	33.65	2.540	31.05	3.577	2.325	4	0.73	4%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0515	27.77	1.080			1.080	1			0
191.99	Acid Soluble Chromium , Other (ppm)	0220	31.20	1.000	32.17	0.8621	3.144	3	-1.12	2%	0
191.99	Acid Soluble Chromium , Other (ppm)	0512	32.46	7.333	32.17	0.8621	3.144	3	0.34	0%	0
191.99	Acid Soluble Chromium , Other (ppm)	0506	32.85	1.100	32.17	0.8621	3.144	3	0.79	1%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	1.700	0.0000	2.234	0.4854	0.2976	8	-1.10	12%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0501	1.885	0.0500	2.234	0.4854	0.2976	8	-0.72	8%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0035	1.945	0.9500	2.234	0.4854	0.2976	8	-0.60	6%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0102	1.985	0.0510	2.234	0.4854	0.2976	8	-0.51	6%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	2.225	0.3900	2.234	0.4854	0.2976	8	-0.02	0%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0230	2.535	0.2100	2.234	0.4854	0.2976	8	0.62	7%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	2.800	0.2000	2.234	0.4854	0.2976	8	1.17	13%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0368	2.865	0.5300	2.234	0.4854	0.2976	8	1.30	14%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0095	4.000	2.000	2.234	0.4854	0.2976	8	3.64	40%	1
202.32	Acid Soluble Cobalt , ICP, 2006.03 (ppm)	0423	2.330	0.1800			0.1800	1			0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0515	2.383	1.125	2.839	0.4511	0.4162	3	-1.01	8%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0494	2.848	0.1132	2.839	0.4511	0.4162	3	0.02	0%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified ... (ppm)	0037	3.285	0.0100	2.839	0.4511	0.4162	3	0.99	8%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	0.4663	0.9325			0.9325	0			4

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
202.99	Acid Soluble Cobalt , Other (ppm)	0220	4.000	0.4000	6.913	4.620	1.689	3	-0.63	21%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0506	4.500	1.000	6.913	4.620	1.689	3	-0.52	17%	0
202.99	Acid Soluble Cobalt , Other (ppm)	0512	12.24	3.666	6.913	4.620	1.689	3	1.15	39%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0481	0.0400	0.0000	0.0447	0.0033	0.0021	8	-1.43	5%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0043	0.0420	0.0020	0.0447	0.0033	0.0021	8	-0.82	3%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0029	0.0437	0.0039	0.0447	0.0033	0.0021	8	-0.31	1%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0485	0.0439	0.0006	0.0447	0.0033	0.0021	8	-0.24	1%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0498	0.0450	0.0020	0.0447	0.0033	0.0021	8	0.10	0%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0397	0.0467	0.0009	0.0447	0.0033	0.0021	8	0.61	2%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0040	0.0477	0.0067	0.0447	0.0033	0.0021	8	0.91	3%	0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (... (0.05%))	0457	0.0485	0.0010	0.0447	0.0033	0.0021	8	1.17	4%	0
221.03	Acid Soluble Copper , AA, 965.09, test porti... (0.05%)	0117	0.0415	0.0018	0.0440	0.0035	0.0034	2	-0.71	3%	0
221.03	Acid Soluble Copper , AA, 965.09, test porti... (0.05%)	0023	0.0465	0.0050	0.0440	0.0035	0.0034	2	0.71	3%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0234	0.0200*	0.0000	0.0443	0.0033	0.0034	24	-7.29	27%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0131	0.0288*	0.0011	0.0443	0.0033	0.0034	24	-4.66	18%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0230	0.0335*	0.0010	0.0443	0.0033	0.0034	24	-3.23	12%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0027	0.0385	0.0010	0.0443	0.0033	0.0034	24	-1.73	6%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0041	0.0400	0.0080	0.0443	0.0033	0.0034	24	-1.28	5%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0095	0.0400	0.0000	0.0443	0.0033	0.0034	24	-1.28	5%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0291	0.0400	0.0000	0.0443	0.0033	0.0034	24	-1.28	5%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0035	0.0430	0.0017	0.0443	0.0033	0.0034	24	-0.39	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0307	0.0430	0.0080	0.0443	0.0033	0.0034	24	-0.38	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0090	0.0435	0.0010	0.0443	0.0033	0.0034	24	-0.23	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0354	0.0445	0.0050	0.0443	0.0033	0.0034	24	0.07	0%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0368	0.0448	0.0006	0.0443	0.0033	0.0034	24	0.16	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0360	0.0450	0.0020	0.0443	0.0033	0.0034	24	0.22	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0402	0.0450	0.0100	0.0443	0.0033	0.0034	24	0.22	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0472	0.0450	0.0100	0.0443	0.0033	0.0034	24	0.22	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0482	0.0450	0.0100	0.0443	0.0033	0.0034	24	0.22	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0096	0.0451	0.0020	0.0443	0.0033	0.0034	24	0.25	1%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0055	0.0458	0.0039	0.0443	0.0033	0.0034	24	0.45	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0157	0.0460	0.0040	0.0443	0.0033	0.0034	24	0.53	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0433	0.0463	0.0009	0.0443	0.0033	0.0034	24	0.60	2%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0444	0.0485	0.0070	0.0443	0.0033	0.0034	24	1.28	5%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0102	0.0490	0.0020	0.0443	0.0033	0.0034	24	1.43	5%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0114	0.0500	0.0020	0.0443	0.0033	0.0034	24	1.73	6%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0231	0.0500	0.0000	0.0443	0.0033	0.0034	24	1.73	6%	0
221.30	Acid Soluble Copper , ICP, test portion inor... (0.05%)	0483	486.5	45.00	0.0443	0.0033	0.0034	24	146171.35	549647%	2
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0394	0.0420	0.0020	0.0448	0.0039	0.0015	2	-0.71	3%	0
221.32	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0423	0.0475	0.0010	0.0448	0.0039	0.0015	2	0.71	3%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0421	0.0325*	0.0050	0.0440	0.0095	0.0036	6	-1.21	13%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0515	0.0387	0.0029	0.0440	0.0095	0.0036	6	-0.56	6%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0494	0.0412	0.0008	0.0440	0.0095	0.0036	6	-0.29	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				
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0037	0.0455	0.0030	0.0440	0.0095	0.0036	6	0.16	2%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0486	0.0500	0.0000	0.0440	0.0095	0.0036	6	0.64	7%	0
221.33	Acid Soluble Copper , ICP, test portion 2006... (0.05%)	0422	0.4950	0.0100	0.0440	0.0095	0.0036	6	47.52	513%	0
221.99	Acid Soluble Copper , Other (0.05%)	0515	0.0399	0.0001	0.0449	0.0046	0.0019	8	-1.08	6%	0
221.99	Acid Soluble Copper , Other (0.05%)	0220	0.0405	0.0010	0.0449	0.0046	0.0019	8	-0.94	5%	0
221.99	Acid Soluble Copper , Other (0.05%)	0501	0.0425	0.0010	0.0449	0.0046	0.0019	8	-0.51	3%	0
221.99	Acid Soluble Copper , Other (0.05%)	0487	0.0441	0.0010	0.0449	0.0046	0.0019	8	-0.16	1%	0
221.99	Acid Soluble Copper , Other (0.05%)	0389	0.0449	0.0021	0.0449	0.0046	0.0019	8	0.00	0%	0
221.99	Acid Soluble Copper , Other (0.05%)	0512	0.0460	0.0020	0.0449	0.0046	0.0019	8	0.25	1%	0
221.99	Acid Soluble Copper , Other (0.05%)	0508	0.0500	0.0020	0.0449	0.0046	0.0019	8	1.11	6%	0
221.99	Acid Soluble Copper , Other (0.05%)	0042	0.0520	0.0060	0.0449	0.0046	0.0019	8	1.54	8%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.8%)	0481	0.5200	0.0400	0.5527	0.0305	0.0190	4	-1.07	3%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.8%)	0043	0.5350	0.0100	0.5527	0.0305	0.0190	4	-0.58	2%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.8%)	0029	0.5692	0.0171	0.5527	0.0305	0.0190	4	0.54	1%	0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.8%)	0485	0.5865	0.0090	0.5527	0.0305	0.0190	4	1.11	3%	0
241.03	Acid Soluble Iron , AA, 965.09, test portion ... (0.8%)	0117	0.5590	0.0480			0.0480	1			0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0230	0.3810*	0.0140	0.4880	0.0447	0.0150	25	-2.40	11%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0027	0.3865*	0.0150	0.4880	0.0447	0.0150	25	-2.27	10%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0131	0.4272*	0.0086	0.4880	0.0447	0.0150	25	-1.36	6%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0102	0.4360*	0.0020	0.4880	0.0447	0.0150	25	-1.16	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0035	0.4450*	0.0060	0.4880	0.0447	0.0150	25	-0.96	4%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0420	0.4469	0.0304	0.4880	0.0447	0.0150	25	-0.92	4%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0095	0.4600	0.0000	0.4880	0.0447	0.0150	25	-0.63	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0157	0.4680	0.0000	0.4880	0.0447	0.0150	25	-0.45	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0402	0.4700	0.0200	0.4880	0.0447	0.0150	25	-0.40	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0472	0.4700	0.0000	0.4880	0.0447	0.0150	25	-0.40	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0482	0.4750	0.0100	0.4880	0.0447	0.0150	25	-0.29	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0090	0.4805	0.0050	0.4880	0.0447	0.0150	25	-0.17	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0291	0.4950	0.0100	0.4880	0.0447	0.0150	25	0.16	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0433	0.4994	0.0005	0.4880	0.0447	0.0150	25	0.25	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0096	0.5000	0.0200	0.4880	0.0447	0.0150	25	0.27	1%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0234	0.5050	0.0100	0.4880	0.0447	0.0150	25	0.38	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0444	0.5050	0.0100	0.4880	0.0447	0.0150	25	0.38	2%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0368	0.5153	0.0064	0.4880	0.0447	0.0150	25	0.61	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0354	0.5220	0.0520	0.4880	0.0447	0.0150	25	0.76	3%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0231	0.5250	0.0100	0.4880	0.0447	0.0150	25	0.83	4%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0041	0.5255	0.0730	0.4880	0.0447	0.0150	25	0.84	4%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0360	0.5265	0.0090	0.4880	0.0447	0.0150	25	0.86	4%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0055	0.5383	0.0284	0.4880	0.0447	0.0150	25	1.13	5%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0371	0.5525	0.0350	0.4880	0.0447	0.0150	25	1.44	7%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0114	0.5800	0.0000	0.4880	0.0447	0.0150	25	2.06	9%	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.8%)	0483	5.885	250.0	0.4880	0.0447	0.0150	25	131721.07	602888%	2
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0394	0.4505	0.0030	0.4885	0.0537	0.0060	2	-0.71	4%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0423	0.5265	0.0090	0.4885	0.0537	0.0060	2	0.71	4%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0515	0.4674	0.0230	0.5123	0.0392	0.0137	10	-1.14	4%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0177	0.4720	0.0027	0.5123	0.0392	0.0137	10	-1.03	4%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0397	0.4823	0.0188	0.5123	0.0392	0.0137	10	-0.76	3%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0494	0.4946	0.0014	0.5123	0.0392	0.0137	10	-0.45	2%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0421	0.5065	0.0050	0.5123	0.0392	0.0137	10	-0.15	1%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0025	0.5174	0.0118	0.5123	0.0392	0.0137	10	0.13	1%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0023	0.5250	0.0340	0.5123	0.0392	0.0137	10	0.33	1%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0037	0.5290	0.0100	0.5123	0.0392	0.0137	10	0.43	2%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0422	0.5650	0.0100	0.5123	0.0392	0.0137	10	1.35	5%	0
241.33	Acid Soluble Iron , ICP, test portion 2006.03... (0.8%)	0486	0.7200	0.0200	0.5123	0.0392	0.0137	10	5.30	20%	0
241.99	Acid Soluble Iron , Other (0.8%)	0501	0.2550*	0.0500	0.4919	0.0177	0.0157	7	-13.42	24%	0
241.99	Acid Soluble Iron , Other (0.8%)	0506	0.4800	0.0000	0.4919	0.0177	0.0157	7	-0.67	1%	0
241.99	Acid Soluble Iron , Other (0.8%)	0512	0.4885	0.0310	0.4919	0.0177	0.0157	7	-0.19	0%	0
241.99	Acid Soluble Iron , Other (0.8%)	0515	0.4896	0.0038	0.4919	0.0177	0.0157	7	-0.13	0%	0
241.99	Acid Soluble Iron , Other (0.8%)	0220	0.4950	0.0100	0.4919	0.0177	0.0157	7	0.18	0%	0
241.99	Acid Soluble Iron , Other (0.8%)	0389	0.5135	0.0050	0.4919	0.0177	0.0157	7	1.22	2%	0
241.99	Acid Soluble Iron , Other (0.8%)	0042	0.6050	0.0100	0.4919	0.0177	0.0157	7	6.41	11%	0
251.00	Acid Soluble Lead , AA, test portion as in 2... (ppm)	0136	297.5	11.00			11.00	1			0
251.30	Acid Soluble Lead , ICP (ppm)	0444	192.0	2.000	260.5	45.37	10.24	11	-1.51	13%	0
251.30	Acid Soluble Lead , ICP (ppm)	0394	204.5	5.000	260.5	45.37	10.24	11	-1.24	11%	0
251.30	Acid Soluble Lead , ICP (ppm)	0482	221.0	6.000	260.5	45.37	10.24	11	-0.87	8%	0
251.30	Acid Soluble Lead , ICP (ppm)	0230	236.5	17.00	260.5	45.37	10.24	11	-0.53	5%	0
251.30	Acid Soluble Lead , ICP (ppm)	0035	259.0	20.00	260.5	45.37	10.24	11	-0.03	0%	0
251.30	Acid Soluble Lead , ICP (ppm)	0095	268.5	17.00	260.5	45.37	10.24	11	0.18	2%	0
251.30	Acid Soluble Lead , ICP (ppm)	0102	287.3	6.589	260.5	45.37	10.24	11	0.59	5%	0
251.30	Acid Soluble Lead , ICP (ppm)	0096	288.2	3.500	260.5	45.37	10.24	11	0.61	5%	0
251.30	Acid Soluble Lead , ICP (ppm)	0368	289.2	16.56	260.5	45.37	10.24	11	0.63	5%	0
251.30	Acid Soluble Lead , ICP (ppm)	0389	307.0	6.000	260.5	45.37	10.24	11	1.02	9%	0
251.30	Acid Soluble Lead , ICP (ppm)	0501	307.5	13.00	260.5	45.37	10.24	11	1.04	9%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0027	228.7	2.109	270.5	34.60	7.126	4	-1.21	8%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0515	255.4	8.280	270.5	34.60	7.126	4	-0.44	3%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0494	297.4	14.86	270.5	34.60	7.126	4	0.78	5%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/... (ppm)	0037	300.4	3.260	270.5	34.60	7.126	4	0.87	6%	0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	254.8	7.646			7.646	1			0
251.99	Acid Soluble Lead , Other (ppm)	0506	231.5	1.000	262.9	33.23	2.750	4	-0.94	6%	0
251.99	Acid Soluble Lead , Other (ppm)	0481	238.0	2.000	262.9	33.23	2.750	4	-0.75	5%	0
251.99	Acid Soluble Lead , Other (ppm)	0220	283.0	2.000	262.9	33.23	2.750	4	0.61	4%	0
251.99	Acid Soluble Lead , Other (ppm)	0487	299.0	6.000	262.9	33.23	2.750	4	1.09	7%	0
261.00	Acid Soluble Manganese , AA, Mn2+ only (0.25%)	0043	0.0778	0.0015			0.0015	1			0
261.11	Acid Soluble Manganese , AA, total Mn (0.25%)	0498	0.0565*	0.0030	0.0633	0.0095	0.0015	2	-0.71	5%	0
261.11	Acid Soluble Manganese , AA, total Mn (0.25%)	0481	0.0700	0.0000	0.0633	0.0095	0.0015	2	0.71	5%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0457	0.0790	0.0020	0.0853	0.0077	0.0041	4	-0.81	4%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0040	0.0805	0.0030	0.0853	0.0077	0.0041	4	-0.62	3%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0029	0.0855	0.0012	0.0853	0.0077	0.0041	4	0.03	0%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.25%)	0485	0.0960	0.0100	0.0853	0.0077	0.0041	4	1.40	6%	0
261.13	Acid Soluble Manganese , AA, organic 965.09 ... (0.25%)	0027	0.0200*	0.0000			0.0000	1			0
261.15	Acid Soluble Manganese , AA, 965.09, test po... (0.25%)	0117	0.1111	0.0338			0.0338	1			0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0131	0.0746	0.0033	0.0820	0.0073	0.0024	14	-1.03	5%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0433	0.0746	0.0012	0.0820	0.0073	0.0024	14	-1.02	5%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0035	0.0753	0.0007	0.0820	0.0073	0.0024	14	-0.93	4%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0307	0.0760	0.0000	0.0820	0.0073	0.0024	14	-0.83	4%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0102	0.0785	0.0030	0.0820	0.0073	0.0024	14	-0.48	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0157	0.0790	0.0020	0.0820	0.0073	0.0024	14	-0.42	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0291	0.0800	0.0000	0.0820	0.0073	0.0024	14	-0.28	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0354	0.0805	0.0070	0.0820	0.0073	0.0024	14	-0.21	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0096	0.0821	0.0006	0.0820	0.0073	0.0024	14	0.01	0%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0368	0.0862	0.0015	0.0820	0.0073	0.0024	14	0.57	3%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0041	0.0875	0.0070	0.0820	0.0073	0.0024	14	0.75	3%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0472	0.0900	0.0000	0.0820	0.0073	0.0024	14	1.10	5%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0090	0.0925	0.0050	0.0820	0.0073	0.0024	14	1.44	6%	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0420	0.1143	0.0019	0.0820	0.0073	0.0024	14	4.43	20%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0230	0.0637*	0.0004	0.0784	0.0130	0.0043	5	-1.13	9%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0234	0.0650*	0.0100	0.0784	0.0130	0.0043	5	-1.03	9%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0482	0.0850	0.0100	0.0784	0.0130	0.0043	5	0.50	4%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0360	0.0885	0.0010	0.0784	0.0130	0.0043	5	0.77	6%	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.25%)	0231	0.0900	0.0000	0.0784	0.0130	0.0043	5	0.89	7%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0027	0.0660*	0.0020	0.0785	0.0085	0.0036	5	-1.46	8%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0402	0.0750	0.0100	0.0785	0.0085	0.0036	5	-0.41	2%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0055	0.0793	0.0019	0.0785	0.0085	0.0036	5	0.09	1%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0444	0.0840	0.0020	0.0785	0.0085	0.0036	5	0.65	4%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0371	0.0880	0.0020	0.0785	0.0085	0.0036	5	1.12	6%	0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.25%)	0483	818.0	22.00	0.0785	0.0085	0.0036	5	96134.63	521301%	2
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0394	0.0739	0.0003	0.0824	0.0121	0.0012	2	-0.71	5%	0
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0423	0.0910	0.0020	0.0824	0.0121	0.0012	2	0.71	5%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0515	0.0611*	0.0027	0.0802	0.0069	0.0033	8	-2.79	12%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0397	0.0730	0.0040	0.0802	0.0069	0.0033	8	-1.05	4%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0494	0.0794	0.0007	0.0802	0.0069	0.0033	8	-0.12	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0177	0.0799	0.0038	0.0802	0.0069	0.0033	8	-0.04	0%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0421	0.0815	0.0050	0.0802	0.0069	0.0033	8	0.19	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0023	0.0850	0.0040	0.0802	0.0069	0.0033	8	0.70	3%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0037	0.0860	0.0000	0.0802	0.0069	0.0033	8	0.85	4%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0025	0.0867	0.0059	0.0802	0.0069	0.0033	8	0.94	4%	0
261.35	Acid Soluble Manganese , ICP, test portion 2... (0.25%)	0486	0.1100	0.0200	0.0802	0.0069	0.0033	8	4.35	19%	1
261.99	Acid Soluble Manganese , Other (0.25%)	0501	0.0705	0.0030	0.0797	0.0064	0.0025	8	-1.44	6%	0
261.99	Acid Soluble Manganese , Other (0.25%)	0515	0.0747	0.0042	0.0797	0.0064	0.0025	8	-0.78	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				
261.99	Acid Soluble Manganese , Other (0.25%)	0389	0.0771	0.0014	0.0797	0.0064	0.0025	8	-0.40	2%	0
261.99	Acid Soluble Manganese , Other (0.25%)	0220	0.0790	0.0040	0.0797	0.0064	0.0025	8	-0.10	0%	0
261.99	Acid Soluble Manganese , Other (0.25%)	0095	0.0800	0.0000	0.0797	0.0064	0.0025	8	0.05	0%	0
261.99	Acid Soluble Manganese , Other (0.25%)	0506	0.0800	0.0000	0.0797	0.0064	0.0025	8	0.05	0%	0
261.99	Acid Soluble Manganese , Other (0.25%)	0042	0.0960	0.0000	0.0797	0.0064	0.0025	8	2.56	10%	0
261.99	Acid Soluble Manganese , Other (0.25%)	0512	0.1385	0.0070	0.0797	0.0064	0.0025	8	9.22	37%	0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0394	0.0195	0.0010	0.0404	0.0398	0.0007	4	-0.53	26%	0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0444	0.0195	0.0010	0.0404	0.0398	0.0007	4	-0.53	26%	0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0368	0.0226	0.0007	0.0404	0.0398	0.0007	4	-0.45	22%	0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0230	0.1000	0.0000	0.0404	0.0398	0.0007	4	1.50	74%	0
271.99	Water Soluble Manganese , Other (%)	0220	0.0190	0.0000	0.0468	0.0392	0.0005	2	-0.71	30%	0
271.99	Water Soluble Manganese , Other (%)	0501	0.0745	0.0010	0.0468	0.0392	0.0005	2	0.71	30%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0501	108.5	11.00	110.5	2.815	7.064	2	-0.71	1%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	112.5	3.127	110.5	2.815	7.064	2	0.71	1%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0230	301.0	24.00	356.5	44.92	7.339	7	-1.24	8%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0433	327.0	3.991	356.5	44.92	7.339	7	-0.66	4%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0035	336.5	5.000	356.5	44.92	7.339	7	-0.45	3%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0102	353.4	0.5920	356.5	44.92	7.339	7	-0.07	0%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0096	365.8	9.800	356.5	44.92	7.339	7	0.21	1%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0095	400.0	0.0000	356.5	44.92	7.339	7	0.97	6%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0368	431.9	7.990	356.5	44.92	7.339	7	1.68	11%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0444	240.0*	60.00	356.5	44.92	7.339	7	-2.59	16%	1
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (30ppm)	0394	0.0325*	0.0010			0.0010	1			0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (30ppm)	0027	301.0	5.315	359.4	29.61	13.89	6	-1.97	8%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (30ppm)	0423	348.9	3.200	359.4	29.61	13.89	6	-0.35	1%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (30ppm)	0515	351.9	24.11	359.4	29.61	13.89	6	-0.25	1%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (30ppm)	0494	360.7	7.918	359.4	29.61	13.89	6	0.05	0%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (30ppm)	0220	382.0	10.00	359.4	29.61	13.89	6	0.76	3%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modif... (30ppm)	0037	409.5	32.81	359.4	29.61	13.89	6	1.69	7%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (30ppm)	0501	255.0	10.00	303.4	68.44	5.126	2	-0.71	8%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (30ppm)	0515	351.8	0.2520	303.4	68.44	5.126	2	0.71	8%	0
289.99	Acid Soluble Molybdenum , Other (30ppm)	0042	0.0350*	0.0100	318.0	291.8	8.637	3	-1.09	50%	0
289.99	Acid Soluble Molybdenum , Other (30ppm)	0220	380.5	1.000	318.0	291.8	8.637	3	0.21	10%	0
289.99	Acid Soluble Molybdenum , Other (30ppm)	0481	573.5	24.90	318.0	291.8	8.637	3	0.88	40%	0
291.00	Acid Soluble Nickel , AA, test portion as in... (ppm)	0136	166.0	2.000			2.000	1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	119.0	4.000	147.1	22.39	8.013	10	-1.25	10%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0027	128.5	0.0320	147.1	22.39	8.013	10	-0.83	6%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0394	129.0	6.000	147.1	22.39	8.013	10	-0.81	6%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0230	133.5	3.000	147.1	22.39	8.013	10	-0.61	5%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	139.5	15.00	147.1	22.39	8.013	10	-0.34	3%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0102	151.4	3.165	147.1	22.39	8.013	10	0.19	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	160.5	15.00	147.1	22.39	8.013	10	0.60	5%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0095	164.5	17.00	147.1	22.39	8.013	10	0.78	6%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
291.30	Acid Soluble Nickel , ICP (ppm)	0096	170.1	5.400	147.1	22.39	8.013	10	1.03	8%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0368	174.9	11.53	147.1	22.39	8.013	10	1.24	9%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0515	161.9	9.589	172.0	10.91	9.454	3	-0.92	3%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0494	170.4	8.413	172.0	10.91	9.454	3	-0.14	0%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified ... (ppm)	0037	183.6	10.36	172.0	10.91	9.454	3	1.06	3%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0501	85.50	1.000	120.2	49.04	1.586	2	-0.71	14%	0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	154.9	2.171	120.2	49.04	1.586	2	0.71	14%	0
291.99	Acid Soluble Nickel , Other (ppm)	0512	17.86	6.960	133.7	78.47	7.990	4	-1.48	43%	0
291.99	Acid Soluble Nickel , Other (ppm)	0506	154.0	14.00	133.7	78.47	7.990	4	0.26	8%	0
291.99	Acid Soluble Nickel , Other (ppm)	0220	175.5	9.000	133.7	78.47	7.990	4	0.53	16%	0
291.99	Acid Soluble Nickel , Other (ppm)	0481	187.5	2.000	133.7	78.47	7.990	4	0.69	20%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0501	0.2300	0.0400	0.5575	0.4632	0.1150	2	-0.71	29%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0368	0.8850	0.1900	0.5575	0.4632	0.1150	2	0.71	29%	0
301.30	Acid Soluble Selenium , ICP (ppm)	0230	0.0000	0.0000	0.5575	0.4632	0.1150	2	-1.20	50%	4
301.33	Acid Soluble Selenium , ICP, 2006.03 modifie... (ppm)	0515	0.0000	0.0000			0.0000	0			4
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0515	0.0000	0.0000			0.0000	0			4
311.30	Sodium, Flame Photometric (%)	0510	0.3200	0.0200			0.0200	1			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0423	0.0295	0.0010	0.2459	0.1232	0.0052	5	-1.76	44%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0494	0.2675	0.0018	0.2459	0.1232	0.0052	5	0.18	4%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0035	0.2970	0.0100	0.2459	0.1232	0.0052	5	0.41	10%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0102	0.3020	0.0020	0.2459	0.1232	0.0052	5	0.46	11%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0025	0.3334	0.0112	0.2459	0.1232	0.0052	5	0.71	18%	0
311.99	Sodium, Other (%)	0482	0.2850	0.0100	0.3331	0.0800	0.0073	4	-0.60	7%	0
311.99	Sodium, Other (%)	0501	0.2900	0.0000	0.3331	0.0800	0.0073	4	-0.54	6%	0
311.99	Sodium, Other (%)	0096	0.3050	0.0100	0.3331	0.0800	0.0073	4	-0.35	4%	0
311.99	Sodium, Other (%)	0354	0.4525	0.0090	0.3331	0.0800	0.0073	4	1.49	18%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	0498	0.4750*	0.0100	0.5687	0.0587	0.0099	7	-1.60	8%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	0428	0.5234	0.0084	0.5687	0.0587	0.0099	7	-0.77	4%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	0029	0.5642	0.0011	0.5687	0.0587	0.0099	7	-0.08	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	0481	0.5700	0.0000	0.5687	0.0587	0.0099	7	0.02	0%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	0485	0.5875	0.0290	0.5687	0.0587	0.0099	7	0.32	2%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	0043	0.6075	0.0150	0.5687	0.0587	0.0099	7	0.66	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	0457	0.6420	0.0060	0.5687	0.0587	0.0099	7	1.25	6%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.5%)	0040	0.6480	0.0860	0.5687	0.0587	0.0099	7	1.35	7%	1
321.03	Acid Soluble Zinc , AA, 965.09, test portion... (0.5%)	0117	0.5340	0.0300			0.0300	1			0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0095	0.5200	0.0600	0.5939	0.0576	0.0449	27	-1.28	6%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0072	0.5250	0.0500	0.5939	0.0576	0.0449	27	-1.20	6%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0157	0.5290	0.0340	0.5939	0.0576	0.0449	27	-1.13	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0482	0.5300	0.0200	0.5939	0.0576	0.0449	27	-1.11	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0307	0.5315	0.0490	0.5939	0.0576	0.0449	27	-1.08	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0131	0.5404	0.0068	0.5939	0.0576	0.0449	27	-0.93	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0035	0.5458	0.0900	0.5939	0.0576	0.0449	27	-0.84	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0234	0.5700	0.0200	0.5939	0.0576	0.0449	27	-0.42	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				
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0291	0.5700	0.0200	0.5939	0.0576	0.0449	27	-0.42	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0292	0.5700	0.0200	0.5939	0.0576	0.0449	27	-0.42	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0230	0.5730	0.0940	0.5939	0.0576	0.0449	27	-0.36	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0444	0.5800	0.0400	0.5939	0.0576	0.0449	27	-0.24	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0354	0.5815	0.0110	0.5939	0.0576	0.0449	27	-0.22	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0368	0.5868	0.0134	0.5939	0.0576	0.0449	27	-0.12	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0420	0.5890	0.0581	0.5939	0.0576	0.0449	27	-0.09	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0433	0.5966	0.0006	0.5939	0.0576	0.0449	27	0.05	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0360	0.6065	0.0210	0.5939	0.0576	0.0449	27	0.22	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0402	0.6100	0.0800	0.5939	0.0576	0.0449	27	0.28	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0472	0.6100	0.0000	0.5939	0.0576	0.0449	27	0.28	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0090	0.6270	0.0060	0.5939	0.0576	0.0449	27	0.57	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0371	0.6380	0.0680	0.5939	0.0576	0.0449	27	0.76	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0231	0.6550	0.0100	0.5939	0.0576	0.0449	27	1.06	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0102	0.6565	0.0830	0.5939	0.0576	0.0449	27	1.09	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0114	0.6650	0.0300	0.5939	0.0576	0.0449	27	1.23	6%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0055	0.6739	0.0083	0.5939	0.0576	0.0449	27	1.39	7%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0096	0.6844	0.0121	0.5939	0.0576	0.0449	27	1.57	8%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0041	0.7650	0.3060	0.5939	0.0576	0.0449	27	2.97	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.5%)	0483	7,180	320.0	0.5939	0.0576	0.0449	27	124608.22	604387%	2
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0394	0.5940	0.0540	0.6418	0.0675	0.0325	2	-0.71	4%	0
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0423	0.6895	0.0110	0.6418	0.0675	0.0325	2	0.71	4%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0494	0.5327	0.0399	0.5686	0.0319	0.0278	9	-1.13	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0486	0.5350	0.0300	0.5686	0.0319	0.0278	9	-1.05	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0025	0.5557	0.0397	0.5686	0.0319	0.0278	9	-0.41	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0177	0.5566	0.0078	0.5686	0.0319	0.0278	9	-0.38	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0515	0.5586	0.0619	0.5686	0.0319	0.0278	9	-0.32	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0422	0.5800	0.0400	0.5686	0.0319	0.0278	9	0.36	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0023	0.5825	0.0110	0.5686	0.0319	0.0278	9	0.44	1%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0421	0.6055	0.0050	0.5686	0.0319	0.0278	9	1.16	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.0... (0.5%)	0037	0.6195	0.0150	0.5686	0.0319	0.0278	9	1.60	4%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0501	0.4050*	0.0300	0.5638	0.0579	0.0470	10	-2.74	14%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0515	0.4970*	0.0476	0.5638	0.0579	0.0470	10	-1.15	6%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0220	0.5450	0.0700	0.5638	0.0579	0.0470	10	-0.32	2%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0200	0.5500	0.0000	0.5638	0.0579	0.0470	10	-0.24	1%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0042	0.5550	0.1100	0.5638	0.0579	0.0470	10	-0.15	1%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0506	0.5600	0.0000	0.5638	0.0579	0.0470	10	-0.06	0%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0389	0.5790	0.0000	0.5638	0.0579	0.0470	10	0.26	1%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0487	0.6050	0.0160	0.5638	0.0579	0.0470	10	0.71	4%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0027	0.6315	0.0650	0.5638	0.0579	0.0470	10	1.17	6%	0
321.99	Acid Soluble Zinc , Other (0.5%)	0512	0.7575	0.1310	0.5638	0.0579	0.0470	10	3.35	17%	0
325.00	Water Soluble Zinc , AA (%)	0027	0.3480	0.0060			0.0060	1			0
325.30	Water Soluble Zinc , ICP (%)	0230	0.1000	0.0000	0.1951	0.0840	0.0169	6	-1.13	24%	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	
325.30	Water Soluble Zinc , ICP (%)	0394	0.1400	0.0080	0.1951	0.0840	0.0169	6	-0.66	14%	0
325.30	Water Soluble Zinc , ICP (%)	0220	0.1630	0.0240	0.1951	0.0840	0.0169	6	-0.38	8%	0
325.30	Water Soluble Zinc , ICP (%)	0368	0.2303	0.0092	0.1951	0.0840	0.0169	6	0.42	9%	0
325.30	Water Soluble Zinc , ICP (%)	0444	0.2350	0.0500	0.1951	0.0840	0.0169	6	0.47	10%	0
325.30	Water Soluble Zinc , ICP (%)	0501	0.4150	0.0100	0.1951	0.0840	0.0169	6	2.62	56%	0

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