

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 161111

Grade 32-0-10

Statistical Summary

Methods: 121

Labs Reporting: 82

Issue Date : 12/31/2016

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 (%)	2	2	3.270	0.2616								
001.99	Ammoniacal Nitrogen, Other (%)	4	4	3.303	0.5846	3.303		0.5846	0.3654	17.70%		0.0720	3.34%
002.10	Nitrate Nitrogen, Robertson (%)	1		32.95									
002.99	Nitrate Nitrogen, Other (%)	1		0.0100									
003.10	Water Insoluble Nitrogen, Method I (%)	3	3	0.2178	0.0959	0.2178		0.0959	0.0692	44.03%		0.0206	5.03%
003.99	Water Insoluble Nitrogen, Other (%)	1		0.0350									
005.00	Urea Nitrogen, Urease (as N) (%)	3	3	20.92	3.936	20.92		3.936	2.841	18.82%		0.1100	2.53%
005.99	Urea Nitrogen, Other (%)	4	4	25.73	5.514	25.73		5.514	3.446	21.43%		0.4100	2.45%
007.00	Urea, Urease (as Urea) (%)	1		19.26									
007.99	Urea, Other (%)	1		21.18									
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	1		3.600									
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	1		31.08									
010.11	Total Nitrogen, Modified Comprehensive (32%)	7	7	32.11	0.1618	32.11	0.8800	0.1835	0.0867	0.57%	1.37%	0.1186	2.37%
010.12	Total Nitrogen, Salicylic (32%)	2	2	32.05	0.7036								
010.60	Total Nitrogen, Combustion (32%)	57	55	32.43	0.4996	32.44	0.8800	0.2845	0.0480	0.88%	1.36%	0.1586	2.37%
010.99	Total Nitrogen, Other (32%)	12	11	31.88	0.8862	31.96	0.8800	0.8154	0.3073	2.55%	1.38%	0.1935	2.37%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	2	2	0.4454	0.5167								
020.40	Total Phosphorus as P2O5, Automated (%)	1		0.0950									
020.50	Total Phosphorus as P2O5, ICP (%)	7	5	0.0702	0.0873	0.0702		0.0873	0.0488	124.28%		0.0301	5.97%
020.99	Total Phosphorus as P2O5, Other (%)	1		0.0066									
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t... (%)	1		0.0200									
040.40	Indirect Available Phosphorus as P2O5, Automated (%)	1		0.0750									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q... (%)	1		0.1500									
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q... (%)	2	2	0.0468	0.0025								
041.50	Direct Available Phosphorus as P2O5, ICP (%)	2	1	0.1000									
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (%)	2	1	0.0104									
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ... (%)	4	3	0.0575	0.0848	0.0575		0.0848	0.0612	147.47%		0.0037	6.15%
041.99	Direct Available Phosphorus as P2O5, Other (%)	1		0.0110									
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		0.0250									
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	10	10	10.18	0.2157	10.18	0.7057	0.2446	0.0967	2.40%	3.46%	0.1872	2.82%
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	6	6	9.838	0.5526	9.838	0.7057	0.6267	0.3198	6.37%	3.59%	0.2708	2.84%

Method Code	Analyte & Method	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
050.31	Soluble Potassium as K2O, AA (Citrate) (10%)	1		10.21									
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (10%)	1		10.05									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	10	9	10.41	0.5445	10.31	0.7057	0.3152	0.1313	3.06%	3.42%	0.1538	2.82%
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	4	4	10.77	0.3985	10.77	0.7057	0.3985	0.2490	3.70%	3.28%	0.1825	2.80%
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	9	9	10.10	0.3290	10.08	0.7057	0.2748	0.1145	2.73%	3.50%	0.1524	2.82%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala... (10%)	5	5	9.581	0.9585	9.581	0.7057	0.9585	0.5358	10.00%	3.68%	0.2460	2.85%
050.61	Soluble Potassium as K2O, Flame Photometric (Citra... (10%)	2	2	9.780	0.3182								
050.62	Soluble Potassium as K2O, Flame Photometric (Citra... (10%)	5	5	10.03	0.1729	10.03	0.7057	0.1729	0.0967	1.72%	3.52%	0.0970	2.83%
050.99	Soluble Potassium as K2O, Other (10%)	32	30	10.15	0.4739	10.12	0.7057	0.3647	0.0832	3.60%	3.49%	0.1138	2.82%
060.00	Water (Free), Vacuum Oven (%)	4	4	0.6263	0.1853	0.6263		0.1853	0.1158	29.58%		0.0625	4.29%
060.99	Water (Free), Other (%)	2	2	0.6398	0.1269								
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	1		0.0899									
101.03	Acid Soluble Calcium, AA, 965.09, test portion 200... (%)	1		0.0901									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	6	5	0.1654	0.1562	0.1654		0.1562	0.0873	94.42%		0.0072	5.24%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C (%)	2	2	0.1047	0.0236								
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (	3	3	0.0953	0.0059	0.0953		0.0059	0.0043	6.23%		0.0020	5.70%
101.99	Acid Soluble Calcium, Other (%)	1		0.0900									
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (%)	1		0.1181									
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2... (	1		0.1134									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (	6	6	0.1378	0.0384	0.1265		0.0138	0.0071	10.94%		0.0086	5.46%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A... (	2	2	0.1249	0.0133								
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (	3	3	0.1222	0.0041	0.1222		0.0041	0.0030	3.37%		0.0023	5.49%
121.99	Acid Soluble Magnesium, Other (%)	2	2	0.1086	0.0042								
143.99	Elemental Sulfur, Other (%)	2	2	6.638	0.0601								
148.00	Total Sulfur, Combustion (%)	1		7.503									
148.07	Total Sulfur, ICP, test portion as in 2006.03 modi... (%)	5	5	7.024	0.4191	7.024		0.4191	0.2343	5.97%		0.2829	2.98%
148.99	Total Sulfur, Other (%)	4	4	7.007	0.2732	7.007		0.2732	0.1708	3.90%		0.1915	2.98%
149.04	Sulfur - HNO3 soluble, ICP (%)	2	2	7.960	0.3460								
151.30	Acid Soluble Arsenic , ICP (ppm)	2	2	0.0678	0.0315								
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified w/9:3... (	1		1.374									
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	1		0.0000									
151.99	Acid Soluble Arsenic , Other (ppm)	1		0.0495									
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (%)	3	3	0.0027	0.0038	0.0027		0.0038	0.0027	141.18%		0.0000	9.76%
165.99	Acid Soluble Boron , Other (%)	1		0.0011									
181.30	Acid Soluble Cadmium , ICP (ppm)	5	5	0.0277	0.0212	0.0277		0.0212	0.0119	76.56%		0.0055	27.44%
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9:3.. (	1		4.844									
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	1		1.084									
181.99	Acid Soluble Cadmium , Other (ppm)	1		0.0110									
190.00	Water Soluble Chlorine, Titrimetric (%)	1		0.2600									
191.30	Acid Soluble Chromium , ICP (ppm)	6	6	0.9497	0.5256	0.9497		0.5960	0.3041	62.76%		0.1233	16.12%
191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9:... (1		0.3060									
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppn	1		4.332									

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191.99	Acid Soluble Chromium , Other (ppm)	1		0.5560									
202.30	Acid Soluble Cobalt , ICP (ppm)	3	3	0.0276	0.0223	0.0276		0.0223	0.0161	80.96%		0.0004	27.47%
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3 ... (p	2	2	2.451	3.334								
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	1		2.921									
202.99	Acid Soluble Cobalt , Other (ppm)	1		0.0445									
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	2	2	0.0005	0.0002								
221.30	Acid Soluble Copper , ICP, test portion inorganic ... (%)	2	2	0.0036	0.0027								
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-C (%)	2	2	0.0003	0.0000								
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-C... (	2	2	0.3458	0.4878								
221.99	Acid Soluble Copper , Other (%)	3	3	0.0762	0.1311	0.0762		0.1311	0.0946	172.07%		0.0091	5.89%
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	8	7	0.0076	0.0028	0.0076	0.0058	0.0032	0.0015	41.66%	38.64%	0.0017	8.34%
241.03	Acid Soluble Iron, AA, 965.09, test portion 2006.0... (2'	1		0.0047									
241.30	Acid Soluble Iron, ICP, test portion inorganic 965... (2%)	14	13	0.0117	0.0076	0.0107	0.0058	0.0058	0.0020	54.23%	27.34%	0.0026	7.92%
241.32	Acid Soluble Iron, ICP, test portion 2006.03A-C (2%)	3	3	0.0062	0.0001	0.0062	0.0058	0.0001	0.0001	2.15%	47.51%	0.0002	8.61%
241.33	Acid Soluble Iron, ICP, test portion 2006.03A-C, w... (2	4	4	0.0060	0.0022	0.0060	0.0058	0.0022	0.0014	36.51%	49.11%	0.0010	8.65%
241.99	Acid Soluble Iron, Other (2%)	6	6	0.3273	0.7681	0.0225	0.0058	0.0289	0.0148	128.82%	13.01%	0.0031	7.08%
251.30	Acid Soluble Lead , ICP (ppm)	5	5	0.5011	0.4381	0.5011		0.4381	0.2449	87.44%		0.0465	17.75%
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 HN...	1		3.102									
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	1		5.574									
251.99	Acid Soluble Lead , Other (ppm)	1		0.0645									
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (%)	1		0.0010									
261.32	Acid Soluble Manganese , ICP, test portion inorgan... (	1		0.0003									
261.34	Acid Soluble Manganese , ICP, test portion 2006.03...	1		0.0003									
261.35	Acid Soluble Manganese , ICP, test portion 2006.03...	1		0.0001									
261.99	Acid Soluble Manganese , Other (%)	2	2	0.0001	0.0000								
281.30	Acid Soluble Mercury , ICP (ppm)	3	2	0.0060	0.0057	0.0060		0.0057	0.0050	94.28%		0.0010	34.55%
281.99	Acid Soluble Mercury , Other (ppm)	1		0.1620									
289.30	Acid Soluble Molybdenum , ICP (ppm)	3	3	2.803	4.753	2.803		4.753	3.431	169.59%		0.0262	13.70%
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (ppm)	1		0.0730									
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w/..	2	2	3.085	4.238								
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (p	1		3.975									
289.99	Acid Soluble Molybdenum , Other (ppm)	1		0.1110									
291.30	Acid Soluble Nickel , ICP (ppm)	4	4	0.2991	0.1390	0.2991		0.1390	0.0869	46.49%		0.0462	19.18%
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3 ... (p	1		6.443									
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	1		4.927									
291.99	Acid Soluble Nickel , Other (ppm)	2	2	10.11	13.85								
301.30	Acid Soluble Selenium , ICP (ppm)	2	2	0.3584	0.1179								
301.33	Acid Soluble Selenium , ICP, 2006.03 modified w/9:...	1		5.178									
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	1		3.171									
301.99	Acid Soluble Selenium , Other (ppm)	1		0.0280									
311.32	Sodium, ICP, 2006.03 test portion (%)	2	2	0.0263	0.0014								
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test .	4	4	0.0268	0.0054	0.0268		0.0054	0.0034	20.11%		0.0060	6.90%

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
311.99	Sodium, Other (%)	3	3	0.0492	0.0376	0.0492		0.0376	0.0271	76.50%		0.0037	6.29%
321	Acid Soluble Zinc , AA, inorganic 965.09 (%)	4	4	0.0011	0.0006	0.0011		0.0006	0.0004	56.16%		0.0002	11.15%
321.3	Acid Soluble Zinc , ICP, test portion inorganic 96... (%)	5	5	0.0025	0.0019	0.0025		0.0019	0.0011	75.56%		0.0002	9.84%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C (%)	2	2	12.70	17.96								
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, ... (%)	2	2	0.0014	0.0007								
321.99	Acid Soluble Zinc , Other (%)	4	4	0.4214	0.8424	0.4214		0.8424	0.5265	199.88%		0.1275	4.56%

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STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 161111

Method Precision Report

Grade 32-0-10

Issue Date : 12/31/2016

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
010.60	Total Nitrogen, Combustion (32%)	57	51	32.43	0.2946	0.2777	0.1390	0.3105	0.86%	0.43%	0.96%	2.235
010.99	Total Nitrogen, Other (32%)	12	11	31.88	0.8862	0.8774	0.1762	0.8949	2.75%	0.55%	2.81%	5.078
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	10	10	10.18	0.2157	0.1669	0.1933	0.2553	1.64%	1.90%	2.51%	1.321
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	10	8	10.25	0.2288	0.2093	0.1308	0.2468	2.04%	1.28%	2.41%	1.887
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	9	9	10.10	0.3290	0.3158	0.1304	0.3416	3.13%	1.29%	3.38%	2.621
050.99	Soluble Potassium as K2O, Other (10%)	32	27	10.10	0.3990	0.3940	0.0884	0.4038	3.90%	0.87%	4.00%	4.569
241.30	Acid Soluble Iron, ICP, test portion inorganic 965.09 (2%)	14	12	0.0100	0.0046	0.0040	0.0031	0.0051	40.51%	30.98%	51.00%	1.646

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

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Methods: 121

Sample # 161111

Lab Values

Labs Reporting: 82

Grade 32-0-10

Issue Date : 12/31/2016

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 (%)	0444	3.085	0.0100				2			0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0389	3.455	0.1500				2			0
001.99	Ammoniacal Nitrogen, Other (%)	0423	2.750	0.0800	3.303	0.5846	0.0720	4	-0.95	8%	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	3.058	0.0180	3.303	0.5846	0.0720	4	-0.42	4%	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	3.290	0.0800	3.303	0.5846	0.0720	4	-0.02	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	4.115	0.1100	3.303	0.5846	0.0720	4	1.39	12%	0
002.10	Nitrate Nitrogen, Robertson (%)	0230	32.95	0.1000				1			0
002.99	Nitrate Nitrogen, Other (%)	0394	0.0100	0.0120				1			0
003.10	Water Insoluble Nitrogen, Method I (%)	0494	0.1233	0.0218	0.2178	0.0959	0.0206	3	-0.99	22%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0230	0.2150	0.0300	0.2178	0.0959	0.0206	3	-0.03	1%	0
003.10	Water Insoluble Nitrogen, Method I (%)	0090	0.3150	0.0100	0.2178	0.0959	0.0206	3	1.01	22%	0
003.99	Water Insoluble Nitrogen, Other (%)	0486	0.0350	0.0100				1			0
005.00	Urea Nitrogen, Urease (as N) (%)	0230	16.65	0.1000	20.92	3.936	0.1100	3	-1.08	10%	0
005.00	Urea Nitrogen, Urease (as N) (%)	0389	21.70	0.2000	20.92	3.936	0.1100	3	0.20	2%	0
005.00	Urea Nitrogen, Urease (as N) (%)	0524	24.41	0.0300	20.92	3.936	0.1100	3	0.89	8%	0
005.99	Urea Nitrogen, Other (%)	0394	20.85	0.1600	25.73	5.514	0.4100	4	-0.88	9%	0
005.99	Urea Nitrogen, Other (%)	0519	21.13	0.1000	25.73	5.514	0.4100	4	-0.83	9%	0
005.99	Urea Nitrogen, Other (%)	0506	29.60	1.000	25.73	5.514	0.4100	4	0.70	8%	0
005.99	Urea Nitrogen, Other (%)	0027	31.32	0.3800	25.73	5.514	0.4100	4	1.01	11%	0
007.00	Urea, Urease (as Urea) (%)	0486	19.26	0.5500				1			0
007.99	Urea, Other (%)	0220	21.18	0.0100				1			0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0444	3.600	0.2200				1			0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0518	31.08	0.0500				1			0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0211	31.85	0.1000	32.11	0.1835	0.1186	7	-1.28	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0456	32.01	0.1800	32.11	0.1835	0.1186	7	-0.50	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0371	32.05	0.1000	32.11	0.1835	0.1186	7	-0.30	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0510	32.14	0.0800	32.11	0.1835	0.1186	7	0.14	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0090	32.17	0.1800	32.11	0.1835	0.1186	7	0.29	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0220	32.19	0.0400	32.11	0.1835	0.1186	7	0.39	0%	0
010.11	Total Nitrogen, Modified Comprehensive (32%)	0105	32.37	0.1500	32.11	0.1835	0.1186	7	1.25	0%	0
010.12	Total Nitrogen, Salicylic (32%)	0498	31.55	0.1000				2			0
010.12	Total Nitrogen, Salicylic (32%)	0397	32.55	0.0500				2			0
010.60	Total Nitrogen, Combustion (32%)	0521	30.06*	0.0000	32.44	0.2845	0.1586	55	-8.35	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				
010.60	Total Nitrogen, Combustion (32%)	0037	31.76	0.0400	32.44	0.2845	0.1586	55	-2.38	1%	0
010.60	Total Nitrogen, Combustion (32%)	0444	31.80	0.2600	32.44	0.2845	0.1586	55	-2.24	1%	0
010.60	Total Nitrogen, Combustion (32%)	0423	31.93	0.1500	32.44	0.2845	0.1586	55	-1.80	1%	0
010.60	Total Nitrogen, Combustion (32%)	0041	31.99	0.5600	32.44	0.2845	0.1586	55	-1.57	1%	0
010.60	Total Nitrogen, Combustion (32%)	0483	32.03	0.0300	32.44	0.2845	0.1586	55	-1.45	1%	0
010.60	Total Nitrogen, Combustion (32%)	0234	32.07	0.0400	32.44	0.2845	0.1586	55	-1.29	1%	0
010.60	Total Nitrogen, Combustion (32%)	0354	32.08	0.2460	32.44	0.2845	0.1586	55	-1.27	1%	0
010.60	Total Nitrogen, Combustion (32%)	0292	32.20	0.0000	32.44	0.2845	0.1586	55	-0.83	0%	0
010.60	Total Nitrogen, Combustion (32%)	0389	32.20	0.2000	32.44	0.2845	0.1586	55	-0.83	0%	0
010.60	Total Nitrogen, Combustion (32%)	0405	32.24	0.0400	32.44	0.2845	0.1586	55	-0.69	0%	0
010.60	Total Nitrogen, Combustion (32%)	0472	32.24	0.1600	32.44	0.2845	0.1586	55	-0.69	0%	0
010.60	Total Nitrogen, Combustion (32%)	0023	32.24	0.1090	32.44	0.2845	0.1586	55	-0.68	0%	0
010.60	Total Nitrogen, Combustion (32%)	0157	32.25	0.1000	32.44	0.2845	0.1586	55	-0.65	0%	0
010.60	Total Nitrogen, Combustion (32%)	0443	32.28	0.0100	32.44	0.2845	0.1586	55	-0.57	0%	0
010.60	Total Nitrogen, Combustion (32%)	0501	32.29	0.0840	32.44	0.2845	0.1586	55	-0.52	0%	0
010.60	Total Nitrogen, Combustion (32%)	0420	32.30	0.0200	32.44	0.2845	0.1586	55	-0.48	0%	0
010.60	Total Nitrogen, Combustion (32%)	0451	32.30	0.4000	32.44	0.2845	0.1586	55	-0.48	0%	0
010.60	Total Nitrogen, Combustion (32%)	0482	32.30	0.2000	32.44	0.2845	0.1586	55	-0.48	0%	0
010.60	Total Nitrogen, Combustion (32%)	0043	32.32	0.0300	32.44	0.2845	0.1586	55	-0.43	0%	0
010.60	Total Nitrogen, Combustion (32%)	0231	32.36	0.0100	32.44	0.2845	0.1586	55	-0.29	0%	0
010.60	Total Nitrogen, Combustion (32%)	0035	32.38	0.1600	32.44	0.2845	0.1586	55	-0.20	0%	0
010.60	Total Nitrogen, Combustion (32%)	0027	32.40	0.2000	32.44	0.2845	0.1586	55	-0.13	0%	0
010.60	Total Nitrogen, Combustion (32%)	0452	32.41	0.1100	32.44	0.2845	0.1586	55	-0.11	0%	0
010.60	Total Nitrogen, Combustion (32%)	0486	32.41	0.5600	32.44	0.2845	0.1586	55	-0.09	0%	0
010.60	Total Nitrogen, Combustion (32%)	0177	32.43	0.3000	32.44	0.2845	0.1586	55	-0.02	0%	0
010.60	Total Nitrogen, Combustion (32%)	0086	32.43	0.1890	32.44	0.2845	0.1586	55	-0.02	0%	0
010.60	Total Nitrogen, Combustion (32%)	0072	32.45	0.0500	32.44	0.2845	0.1586	55	0.03	0%	0
010.60	Total Nitrogen, Combustion (32%)	0324	32.45	0.1000	32.44	0.2845	0.1586	55	0.05	0%	0
010.60	Total Nitrogen, Combustion (32%)	0007	32.50	0.4000	32.44	0.2845	0.1586	55	0.22	0%	0
010.60	Total Nitrogen, Combustion (32%)	0523	32.50	0.0000	32.44	0.2845	0.1586	55	0.22	0%	0
010.60	Total Nitrogen, Combustion (32%)	0096	32.51	0.0500	32.44	0.2845	0.1586	55	0.24	0%	0
010.60	Total Nitrogen, Combustion (32%)	0042	32.51	0.7200	32.44	0.2845	0.1586	55	0.26	0%	0
010.60	Total Nitrogen, Combustion (32%)	0485	32.51	0.1460	32.44	0.2845	0.1586	55	0.27	0%	0
010.60	Total Nitrogen, Combustion (32%)	0233	32.53	0.1800	32.44	0.2845	0.1586	55	0.33	0%	0
010.60	Total Nitrogen, Combustion (32%)	0102	32.54	0.1500	32.44	0.2845	0.1586	55	0.35	0%	0
010.60	Total Nitrogen, Combustion (32%)	0457	32.54	0.0100	32.44	0.2845	0.1586	55	0.37	0%	0
010.60	Total Nitrogen, Combustion (32%)	0095	32.55	0.0000	32.44	0.2845	0.1586	55	0.40	0%	0
010.60	Total Nitrogen, Combustion (32%)	0307	32.55	0.0600	32.44	0.2845	0.1586	55	0.40	0%	0
010.60	Total Nitrogen, Combustion (32%)	0516	32.55	0.1000	32.44	0.2845	0.1586	55	0.40	0%	0
010.60	Total Nitrogen, Combustion (32%)	0055	32.58	0.1100	32.44	0.2845	0.1586	55	0.49	0%	0
010.60	Total Nitrogen, Combustion (32%)	0029	32.60	0.6200	32.44	0.2845	0.1586	55	0.58	0%	0
010.60	Total Nitrogen, Combustion (32%)	0105	32.64	0.0300	32.44	0.2845	0.1586	55	0.70	0%	0
010.60	Total Nitrogen, Combustion (32%)	0360	32.64	0.1500	32.44	0.2845	0.1586	55	0.70	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total Nitrogen, Combustion (32%)	0136	32.64	0.1400	32.44	0.2845	0.1586	55	0.72	0%	0
010.60	Total Nitrogen, Combustion (32%)	0260	32.68	0.0800	32.44	0.2845	0.1586	55	0.86	0%	0
010.60	Total Nitrogen, Combustion (32%)	0034	32.71	0.0700	32.44	0.2845	0.1586	55	0.95	0%	0
010.60	Total Nitrogen, Combustion (32%)	0040	32.75	0.3000	32.44	0.2845	0.1586	55	1.10	0%	0
010.60	Total Nitrogen, Combustion (32%)	0073	32.75	0.2200	32.44	0.2845	0.1586	55	1.10	0%	0
010.60	Total Nitrogen, Combustion (32%)	0390	32.85	0.1000	32.44	0.2845	0.1586	55	1.45	1%	0
010.60	Total Nitrogen, Combustion (32%)	0494	32.86	0.4100	32.44	0.2845	0.1586	55	1.47	1%	0
010.60	Total Nitrogen, Combustion (32%)	0025	33.03	0.1600	32.44	0.2845	0.1586	55	2.09	1%	0
010.60	Total Nitrogen, Combustion (32%)	0402	33.09	0.0600	32.44	0.2845	0.1586	55	2.30	1%	0
010.60	Total Nitrogen, Combustion (32%)	0230	33.15	0.1000	32.44	0.2845	0.1586	55	2.51	1%	0
010.60	Total Nitrogen, Combustion (32%)	0117	34.30	0.0000	32.44	0.2845	0.1586	55	6.55	3%	0
010.60	Total Nitrogen, Combustion (32%)	0406	31.10*	1.030	32.44	0.2845	0.1586	55	-4.71	2%	1
010.60	Total Nitrogen, Combustion (32%)	0325	31.40*	1.000	32.44	0.2845	0.1586	55	-3.64	2%	1
010.99	Total Nitrogen, Other (32%)	0520	30.09*	0.0100	31.96	0.8154	0.1935	11	-2.30	3%	0
010.99	Total Nitrogen, Other (32%)	0394	30.51*	0.4000	31.96	0.8154	0.1935	11	-1.77	2%	0
010.99	Total Nitrogen, Other (32%)	0481	31.89	0.2900	31.96	0.8154	0.1935	11	-0.09	0%	0
010.99	Total Nitrogen, Other (32%)	0487	31.95	0.1000	31.96	0.8154	0.1935	11	-0.01	0%	0
010.99	Total Nitrogen, Other (32%)	0513	31.97	0.1900	31.96	0.8154	0.1935	11	0.01	0%	0
010.99	Total Nitrogen, Other (32%)	0519	32.00	0.0300	31.96	0.8154	0.1935	11	0.05	0%	0
010.99	Total Nitrogen, Other (32%)	0522	32.09	0.3800	31.96	0.8154	0.1935	11	0.16	0%	0
010.99	Total Nitrogen, Other (32%)	0420	32.12	0.1300	31.96	0.8154	0.1935	11	0.19	0%	0
010.99	Total Nitrogen, Other (32%)	0493	32.15	0.1000	31.96	0.8154	0.1935	11	0.24	0%	0
010.99	Total Nitrogen, Other (32%)	0524	32.73	0.4688	31.96	0.8154	0.1935	11	0.95	1%	0
010.99	Total Nitrogen, Other (32%)	0508	33.24	0.0300	31.96	0.8154	0.1935	11	1.57	2%	0
010.99	Total Nitrogen, Other (32%)	0506	33.75	1.100	31.96	0.8154	0.1935	11	2.20	3%	1
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	0.0800	0.0000				2			0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0428	0.8107	0.0272				2			0
020.40	Total Phosphorus as P2O5, Automated (%)	0096	0.0950	0.0300				1			0
020.50	Total Phosphorus as P2O5, ICP (%)	0524	0.0026	0.0000	0.0702	0.0873	0.0301	5	-0.68	48%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0521	0.0027	0.0000	0.0702	0.0873	0.0301	5	-0.68	48%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0231	0.0150	0.0100	0.0702	0.0873	0.0301	5	-0.55	39%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0157	0.1563	0.0657	0.0702	0.0873	0.0301	5	0.86	61%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	0.1745	0.0750	0.0702	0.0873	0.0301	5	1.04	74%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0390	1.250	0.2600	0.0702	0.0873	0.0301	5	11.80	840%	1
020.50	Total Phosphorus as P2O5, ICP (%)	0389	0.0000	0.0000	0.0702	0.0873	0.0301	5			4
020.99	Total Phosphorus as P2O5, Other (%)	0520	0.0066	0.0001				1			0
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	0.0200	0.0000				1			0
040.40	Indirect Available Phosphorus as P2O5, Automa... (%)	0096	0.0750	0.0300				1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (%)	0494	0.1500	0.0800				1			0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (%)	0185	0.0450	0.0100				2			0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (%)	0485	0.0485	0.0130				2			0
041.50	Direct Available Phosphorus as P2O5, ICP (%)	0325	0.1000	0.0000				1			0
041.50	Direct Available Phosphorus as P2O5, ICP (%)	0072	0.0000	0.0000				1			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				
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (%)	0117	0.0104	0.0112				1			0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (%)	0494	0.0100	0.0200				1			4
041.60	Direct Available Phosphorus as P2O5, Citrate... (%)	0486	0.0010	0.0000	0.0575	0.0848	0.0037	3	-0.67	49%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (%)	0354	0.0165	0.0010	0.0575	0.0848	0.0037	3	-0.48	36%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (%)	0043	0.1550	0.0100	0.0575	0.0848	0.0037	3	1.15	85%	0
041.60	Direct Available Phosphorus as P2O5, Citrate... (%)	0037	0.0500	0.1000	0.0575	0.0848	0.0037	3			4
041.99	Direct Available Phosphorus as P2O5, Other (%)	0519	0.0110	0.0001				1			0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	0.0250	0.0100				1			0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0072	9.949	0.0820	10.18	0.2446	0.1872	10	-0.90	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0494	10.01	0.2100	10.18	0.2446	0.1872	10	-0.68	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0522	10.02	0.1000	10.18	0.2446	0.1872	10	-0.63	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0211	10.06	0.0400	10.18	0.2446	0.1872	10	-0.47	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0405	10.08	0.0100	10.18	0.2446	0.1872	10	-0.42	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0231	10.12	0.0500	10.18	0.2446	0.1872	10	-0.26	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0090	10.22	0.1700	10.18	0.2446	0.1872	10	0.12	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0220	10.33	0.0800	10.18	0.2446	0.1872	10	0.55	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0055	10.53	0.6300	10.18	0.2446	0.1872	10	1.30	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (10%)	0102	10.55	0.5000	10.18	0.2446	0.1872	10	1.39	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0428	9.050*	0.4498	9.838	0.6267	0.2708	6	-1.12	4%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0516	9.389*	0.3350	9.838	0.6267	0.2708	6	-0.64	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0040	9.900	0.4000	9.838	0.6267	0.2708	6	0.09	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0136	9.900	0.0200	9.838	0.6267	0.2708	6	0.09	0%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0157	10.20	0.2000	9.838	0.6267	0.2708	6	0.51	2%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (10%)	0073	10.59	0.2200	9.838	0.6267	0.2708	6	1.07	4%	0
050.31	Soluble Potassium as K2O, AA (Citrate) (10%)	0472	10.21	0.1600				1			0
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (10%)	0185	10.05	0.0300				1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0292	9.995	0.0100	10.31	0.3152	0.1538	9	-0.91	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0055	10.04	0.0000	10.31	0.3152	0.1538	9	-0.78	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0406	10.09	0.3900	10.31	0.3152	0.1538	9	-0.65	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0324	10.25	0.1000	10.31	0.3152	0.1538	9	-0.17	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0397	10.26	0.0300	10.31	0.3152	0.1538	9	-0.15	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0157	10.30	0.2000	10.31	0.3152	0.1538	9	-0.02	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0444	10.34	0.2400	10.31	0.3152	0.1538	9	0.10	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0420	10.72	0.1141	10.31	0.3152	0.1538	9	1.21	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0230	11.75	0.3000	10.31	0.3152	0.1538	9	4.23	7%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (10%)	0390	11.14	1.280	10.31	0.3152	0.1538	9	2.44	4%	1
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0007	10.20	0.4000	10.77	0.3985	0.1825	4	-1.42	3%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0452	10.78	0.0300	10.77	0.3985	0.1825	4	0.02	0%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0483	11.04	0.1700	10.77	0.3985	0.1825	4	0.67	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (10%)	0072	11.06	0.1300	10.77	0.3985	0.1825	4	0.72	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0117	9.539	0.1640	10.08	0.2748	0.1524	9	-1.82	3%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0025	9.836	0.3150	10.08	0.2748	0.1524	9	-0.83	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0485	9.935	0.1100	10.08	0.2748	0.1524	9	-0.49	1%	0

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050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0423	10.06	0.2200	10.08	0.2748	0.1524	9	-0.07	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0023	10.15	0.2500	10.08	0.2748	0.1524	9	0.21	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0360	10.15	0.0600	10.08	0.2748	0.1524	9	0.23	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0354	10.20	0.0130	10.08	0.2748	0.1524	9	0.41	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0494	10.25	0.0100	10.08	0.2748	0.1524	9	0.55	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (10%)	0486	10.75	0.2300	10.08	0.2748	0.1524	9	2.23	3%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0443	7.875*	0.8500	9.581	0.9585	0.2460	5	-1.78	9%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0169	9.860	0.0200	9.581	0.9585	0.2460	5	0.29	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0105	10.02	0.0100	9.581	0.9585	0.2460	5	0.45	2%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0510	10.03	0.0700	9.581	0.9585	0.2460	5	0.46	2%	0
050.60	Soluble Potassium as K2O, Flame Photometric (... (10%)	0041	10.13	0.2800	9.581	0.9585	0.2460	5	0.57	3%	0
050.61	Soluble Potassium as K2O, Flame Photometric (... (10%)	0456	9.555	0.1100				2			0
050.61	Soluble Potassium as K2O, Flame Photometric (... (10%)	0035	10.01	0.0300				2			0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0034	9.773	0.1250	10.03	0.1729	0.0970	5	-1.50	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0037	9.995	0.0700	10.03	0.1729	0.0970	5	-0.22	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0105	10.05	0.0100	10.03	0.1729	0.0970	5	0.07	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0513	10.11	0.0100	10.03	0.1729	0.0970	5	0.42	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (10%)	0029	10.25	0.2700	10.03	0.1729	0.0970	5	1.23	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0521	9.004*	0.0000	10.12	0.3647	0.1138	30	-3.07	6%	0
050.99	Soluble Potassium as K2O, Other (10%)	0482	9.650	0.1600	10.12	0.3647	0.1138	30	-1.30	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0481	9.656	0.0910	10.12	0.3647	0.1138	30	-1.28	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0096	9.705	0.1700	10.12	0.3647	0.1138	30	-1.15	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0523	9.750	0.5000	10.12	0.3647	0.1138	30	-1.02	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0433	9.830	0.0200	10.12	0.3647	0.1138	30	-0.81	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0402	9.840	0.3200	10.12	0.3647	0.1138	30	-0.78	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0519	9.895	0.0100	10.12	0.3647	0.1138	30	-0.63	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0518	9.920	0.0400	10.12	0.3647	0.1138	30	-0.56	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0043	9.930	0.0600	10.12	0.3647	0.1138	30	-0.53	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0506	9.935	0.1300	10.12	0.3647	0.1138	30	-0.52	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0042	9.965	0.2900	10.12	0.3647	0.1138	30	-0.44	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0371	10.05	0.1200	10.12	0.3647	0.1138	30	-0.20	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0389	10.07	0.1400	10.12	0.3647	0.1138	30	-0.15	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0457	10.08	0.0360	10.12	0.3647	0.1138	30	-0.11	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0105	10.12	0.0300	10.12	0.3647	0.1138	30	-0.02	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0520	10.14	0.0200	10.12	0.3647	0.1138	30	0.04	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0501	10.17	0.0458	10.12	0.3647	0.1138	30	0.13	0%	0
050.99	Soluble Potassium as K2O, Other (10%)	0493	10.25	0.1000	10.12	0.3647	0.1138	30	0.35	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0397	10.26	0.0300	10.12	0.3647	0.1138	30	0.36	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0177	10.30	0.1726	10.12	0.3647	0.1138	30	0.48	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0394	10.32	0.0040	10.12	0.3647	0.1138	30	0.53	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0451	10.40	0.0000	10.12	0.3647	0.1138	30	0.76	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0027	10.41	0.5040	10.12	0.3647	0.1138	30	0.79	1%	0
050.99	Soluble Potassium as K2O, Other (10%)	0524	10.48	0.0009	10.12	0.3647	0.1138	30	0.98	2%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
050.99	Soluble Potassium as K2O, Other (10%)	0487	10.50	0.0000	10.12	0.3647	0.1138	30	1.03	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0498	10.50	0.2000	10.12	0.3647	0.1138	30	1.03	2%	0
050.99	Soluble Potassium as K2O, Other (10%)	0234	10.78	0.0400	10.12	0.3647	0.1138	30	1.80	3%	0
050.99	Soluble Potassium as K2O, Other (10%)	0508	11.07	0.1700	10.12	0.3647	0.1138	30	2.58	5%	0
050.99	Soluble Potassium as K2O, Other (10%)	0444	11.60	0.0100	10.12	0.3647	0.1138	30	4.03	7%	0
050.99	Soluble Potassium as K2O, Other (10%)	0325	10.05	0.9000	10.12	0.3647	0.1138	30	-0.20	0%	1
050.99	Soluble Potassium as K2O, Other (10%)	0307	10.49	0.9650	10.12	0.3647	0.1138	30	1.01	2%	1
060.00	Water (Free), Vacuum Oven (%)	0456	0.4100	0.0600	0.6263	0.1853	0.0625	4	-1.17	17%	0
060.00	Water (Free), Vacuum Oven (%)	0007	0.5550	0.0100	0.6263	0.1853	0.0625	4	-0.38	6%	0
060.00	Water (Free), Vacuum Oven (%)	0105	0.7000	0.0400	0.6263	0.1853	0.0625	4	0.40	6%	0
060.00	Water (Free), Vacuum Oven (%)	0096	0.8400	0.1400	0.6263	0.1853	0.0625	4	1.15	17%	0
060.99	Water (Free), Other (%)	0510	0.5500	0.0200				2			0
060.99	Water (Free), Other (%)	0513	0.7295	0.0010				2			0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0105	0.0899	0.0004				1			0
101.03	Acid Soluble Calcium, AA, 965.09, test portio... (%)	0105	0.0901	0.0052				1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	0.0850	0.0100	0.1654	0.1562	0.0072	5	-0.45	24%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	0.0950	0.0020	0.1654	0.1562	0.0072	5	-0.39	21%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0102	0.0957	0.0011	0.1654	0.1562	0.0072	5	-0.39	21%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	0.1070	0.0040	0.1654	0.1562	0.0072	5	-0.33	18%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	0.4445	0.0190	0.1654	0.1562	0.0072	5	1.56	84%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0035	0.1310	0.0960	0.1654	0.1562	0.0072	5	-0.19	10%	1
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0423	0.0880	0.0040				2			0
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0521	0.1213	0.0000				2			0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0117	0.0905	0.0038	0.0953	0.0059	0.0020	3	-0.81	3%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0494	0.0935	0.0004	0.0953	0.0059	0.0020	3	-0.31	1%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0025	0.1020	0.0017	0.0953	0.0059	0.0020	3	1.12	3%	0
101.99	Acid Soluble Calcium, Other (%)	0389	0.0900	0.0000				1			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (%)	0105	0.1181	0.0024				1			0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (%)	0105	0.1134	0.0027				1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0096	0.1150	0.0100	0.1265	0.0138	0.0086	6	-0.74	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0482	0.1150	0.0100	0.1265	0.0138	0.0086	6	-0.74	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0102	0.1225	0.0003	0.1265	0.0138	0.0086	6	-0.26	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0035	0.1275	0.0270	0.1265	0.0138	0.0086	6	0.06	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0354	0.1320	0.0000	0.1265	0.0138	0.0086	6	0.35	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0483	0.2150	0.0040	0.1265	0.0138	0.0086	6	5.69	35%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (%)	0423	0.1155	0.0030				2			0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (%)	0521	0.1343	0.0000				2			0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0117	0.1183	0.0043	0.1222	0.0041	0.0023	3	-0.95	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0494	0.1218	0.0021	0.1222	0.0041	0.0023	3	-0.10	0%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0025	0.1265	0.0005	0.1222	0.0041	0.0023	3	1.05	2%	0
121.99	Acid Soluble Magnesium, Other (%)	0524	0.1056	0.0000				2			0
121.99	Acid Soluble Magnesium, Other (%)	0389	0.1115	0.0010				2			0
143.99	Elemental Sulfur, Other (%)	0472	6.595	0.0900				2			0

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			Value	Range	Rob Mean	Rob SD	R-bar				
143.99	Elemental Sulfur, Other (%)	0389	6.680	0.0200				2			0
148.00	Total Sulfur, Combustion (%)	0451	7.503	0.2050				1			0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0102	6.606	1.059	7.024	0.4191	0.2829	5	-1.00	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0117	6.777	0.1980	7.024	0.4191	0.2829	5	-0.59	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0494	6.839	0.0476	7.024	0.4191	0.2829	5	-0.44	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0292	7.255	0.0100	7.024	0.4191	0.2829	5	0.55	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0483	7.640	0.1000	7.024	0.4191	0.2829	5	1.47	4%	0
148.99	Total Sulfur, Other (%)	0096	6.645	0.3700	7.007	0.2732	0.1915	4	-1.33	3%	0
148.99	Total Sulfur, Other (%)	0354	6.952	0.0030	7.007	0.2732	0.1915	4	-0.20	0%	0
148.99	Total Sulfur, Other (%)	0307	7.183	0.2130	7.007	0.2732	0.1915	4	0.64	1%	0
148.99	Total Sulfur, Other (%)	0482	7.250	0.1800	7.007	0.2732	0.1915	4	0.89	2%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0524	7.716	0.2979				2			0
149.04	Sulfur - HNO3 soluble, ICP (%)	0521	8.205	0.0000				2			0
151.30	Acid Soluble Arsenic, ICP (ppm)	0394	0.0455	0.0230				2			0
151.30	Acid Soluble Arsenic, ICP (ppm)	0519	0.0900	0.0000				2			0
151.33	Acid Soluble Arsenic, ICP, 2006.03 modified ... (ppm)	0515	1.374	1.661				1			0
151.34	Acid Soluble Arsenic, ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
151.99	Acid Soluble Arsenic, Other (ppm)	0042	0.0495	0.0070				1			0
165.30	Acid Soluble Boron, ICP, test portion in 982... (%)	0389	0.0002	0.0000	0.0027	0.0038	0.0000	3	-0.66	46%	0
165.30	Acid Soluble Boron, ICP, test portion in 982... (%)	0521	0.0008	0.0000	0.0027	0.0038	0.0000	3	-0.50	35%	0
165.30	Acid Soluble Boron, ICP, test portion in 982... (%)	0354	0.0070	0.0000	0.0027	0.0038	0.0000	3	1.15	81%	0
165.99	Acid Soluble Boron, Other (%)	0483	0.0011	0.0003				1			0
181.30	Acid Soluble Cadmium, ICP (ppm)	0524	0.0042	0.0007	0.0277	0.0212	0.0055	5	-1.11	43%	0
181.30	Acid Soluble Cadmium, ICP (ppm)	0519	0.0100	0.0000	0.0277	0.0212	0.0055	5	-0.84	32%	0
181.30	Acid Soluble Cadmium, ICP (ppm)	0394	0.0260	0.0060	0.0277	0.0212	0.0055	5	-0.08	3%	0
181.30	Acid Soluble Cadmium, ICP (ppm)	0389	0.0480	0.0040	0.0277	0.0212	0.0055	5	0.95	37%	0
181.30	Acid Soluble Cadmium, ICP (ppm)	0102	0.0505	0.0170	0.0277	0.0212	0.0055	5	1.07	41%	0
181.33	Acid Soluble Cadmium, ICP, 2006.03 modified ... (ppm)	0515	4.844	2.887				1			0
181.34	Acid Soluble Cadmium, ICP, EPA 3050B/6010C (ppm)	0515	1.084	0.2729				1			0
181.99	Acid Soluble Cadmium, Other (ppm)	0042	0.0110	0.0000				1			0
190.00	Water Soluble Chlorine, Titrimetric (%)	0105	0.2600	0.0000				1			0
191.30	Acid Soluble Chromium, ICP (ppm)	0394	0.5500	0.0600	0.9497	0.5960	0.1233	6	-0.60	21%	0
191.30	Acid Soluble Chromium, ICP (ppm)	0102	0.5880	0.3400	0.9497	0.5960	0.1233	6	-0.54	19%	0
191.30	Acid Soluble Chromium, ICP (ppm)	0389	0.6000	0.0400	0.9497	0.5960	0.1233	6	-0.52	18%	0
191.30	Acid Soluble Chromium, ICP (ppm)	0444	0.7850	0.0300	0.9497	0.5960	0.1233	6	-0.25	9%	0
191.30	Acid Soluble Chromium, ICP (ppm)	0519	1.335	0.0300	0.9497	0.5960	0.1233	6	0.58	20%	0
191.30	Acid Soluble Chromium, ICP (ppm)	0035	1.840	0.2400	0.9497	0.5960	0.1233	6	1.33	47%	0
191.33	Acid Soluble Chromium, ICP, 2006.03 modified... (ppm)	0515	0.3060	0.3986				1			0
191.34	Acid Soluble Chromium, ICP, EPA 3050B/6010C (ppm)	0515	4.332	0.8480				1			0
191.99	Acid Soluble Chromium, Other (ppm)	0042	0.5560	0.2000				1			0
202.30	Acid Soluble Cobalt, ICP (ppm)	0389	0.0100	0.0000	0.0276	0.0223	0.0004	3	-0.79	32%	0
202.30	Acid Soluble Cobalt, ICP (ppm)	0519	0.0200	0.0000	0.0276	0.0223	0.0004	3	-0.34	14%	0
202.30	Acid Soluble Cobalt, ICP (ppm)	0524	0.0527	0.0011	0.0276	0.0223	0.0004	3	1.13	46%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0494	0.0935	0.0004				2			0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0515	4.809	4.060				2			0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	2.921	0.0810				1			0
202.99	Acid Soluble Cobalt , Other (ppm)	0042	0.0445	0.0090				1			0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0498	0.0004	0.0000				2			0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0043	0.0007	0.0003				2			0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0483	0.0017	0.0002				2			0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0354	0.0055	0.0010				2			0
221.32	Acid Soluble Copper , ICP, test portion 2006.... (%)	0394	0.0003	0.0001				2			0
221.32	Acid Soluble Copper , ICP, test portion 2006.... (%)	0521	0.0003	0.0000				2			0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0515	0.0009	0.0005				2			0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0494	0.6908	0.0449				2			0
221.99	Acid Soluble Copper , Other (%)	0389	0.0001	0.0000	0.0762	0.1311	0.0091	3	-0.58	50%	0
221.99	Acid Soluble Copper , Other (%)	0515	0.0009	0.0002	0.0762	0.1311	0.0091	3	-0.57	49%	0
221.99	Acid Soluble Copper , Other (%)	0042	0.2275	0.0270	0.0762	0.1311	0.0091	3	1.15	99%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	0498	0.0034	0.0002	0.0076	0.0032	0.0017	7	-1.19	28%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	0513	0.0064	0.0001	0.0076	0.0032	0.0017	7	-0.35	8%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	0043	0.0065	0.0010	0.0076	0.0032	0.0017	7	-0.30	7%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	0105	0.0068	0.0009	0.0076	0.0032	0.0017	7	-0.23	5%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	0040	0.0085	0.0030	0.0076	0.0032	0.0017	7	0.27	6%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	0485	0.0092	0.0029	0.0076	0.0032	0.0017	7	0.46	10%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	0516	0.0124	0.0036	0.0076	0.0032	0.0017	7	1.39	32%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (2%)	0481	0.2930	0.0100	0.0076	0.0032	0.0017	7	81.91	1887%	2
241.03	Acid Soluble Iron, AA, 965.09, test portion 2... (2%)	0105	0.0047	0.0059				1			0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0055	0.0052	0.0008	0.0107	0.0058	0.0026	13	-0.95	26%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0095	0.0054	0.0004	0.0107	0.0058	0.0026	13	-0.91	25%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0360	0.0059	0.0002	0.0107	0.0058	0.0026	13	-0.83	22%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0230	0.0060	0.0000	0.0107	0.0058	0.0026	13	-0.81	22%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0433	0.0066	0.0012	0.0107	0.0058	0.0026	13	-0.71	19%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0035	0.0075	0.0029	0.0107	0.0058	0.0026	13	-0.56	15%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0096	0.0100	0.0000	0.0107	0.0058	0.0026	13	-0.12	3%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0482	0.0100	0.0000	0.0107	0.0058	0.0026	13	-0.12	3%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0231	0.0150	0.0100	0.0107	0.0058	0.0026	13	0.74	20%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0402	0.0150	0.0100	0.0107	0.0058	0.0026	13	0.74	20%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0444	0.0155	0.0030	0.0107	0.0058	0.0026	13	0.83	23%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0354	0.0175	0.0030	0.0107	0.0058	0.0026	13	1.18	32%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0483	0.0325	0.0024	0.0107	0.0058	0.0026	13	3.76	102%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (2%)	0390	0.00000*	0.0000	0.0107	0.0058	0.0026	13			4
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (2%)	0423	0.0060	0.0004	0.0062	0.0001	0.0002	3	-1.13	1%	0
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (2%)	0521	0.0062	0.0000	0.0062	0.0001	0.0002	3	0.38	0%	0
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (2%)	0394	0.0063	0.0001	0.0062	0.0001	0.0002	3	0.76	1%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (2%)	0486	0.0030	0.0000	0.0060	0.0022	0.0010	4	-1.36	25%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (2%)	0117	0.0058	0.0011	0.0060	0.0022	0.0010	4	-0.09	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				
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (2%)	0494	0.0071	0.0003	0.0060	0.0022	0.0010	4	0.51	9%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (2%)	0515	0.0080	0.0024	0.0060	0.0022	0.0010	4	0.94	17%	0
241.99	Acid Soluble Iron, Other (2%)	0524	0.0059	0.0001	0.0225	0.0289	0.0031	6	-0.51	37%	0
241.99	Acid Soluble Iron, Other (2%)	0027	0.0065	0.0010	0.0225	0.0289	0.0031	6	-0.49	36%	0
241.99	Acid Soluble Iron, Other (2%)	0523	0.0065	0.0010	0.0225	0.0289	0.0031	6	-0.49	36%	0
241.99	Acid Soluble Iron, Other (2%)	0389	0.0081	0.0000	0.0225	0.0289	0.0031	6	-0.44	32%	0
241.99	Acid Soluble Iron, Other (2%)	0515	0.0420	0.0065	0.0225	0.0289	0.0031	6	0.60	43%	0
241.99	Acid Soluble Iron, Other (2%)	0519	1.895	0.0100	0.0225	0.0289	0.0031	6	57.65	4169%	0
251.30	Acid Soluble Lead , ICP (ppm)	0524	0.1004	0.0027	0.5011	0.4381	0.0465	5	-0.91	40%	0
251.30	Acid Soluble Lead , ICP (ppm)	0394	0.1600	0.1200	0.5011	0.4381	0.0465	5	-0.78	34%	0
251.30	Acid Soluble Lead , ICP (ppm)	0519	0.4950	0.0100	0.5011	0.4381	0.0465	5	-0.01	1%	0
251.30	Acid Soluble Lead , ICP (ppm)	0389	0.5500	0.1000	0.5011	0.4381	0.0465	5	0.11	5%	0
251.30	Acid Soluble Lead , ICP (ppm)	0096	1.200	0.0000	0.5011	0.4381	0.0465	5	1.60	70%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0515	3.102	0.2440				1			0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	5.574	0.1820				1			0
251.99	Acid Soluble Lead , Other (ppm)	0042	0.0645	0.0010				1			0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0354	0.0010	0.0000				1			0
261.32	Acid Soluble Manganese , ICP, test portion in... (%)	0483	0.0003	0.0001				1			0
261.34	Acid Soluble Manganese , ICP, test portion 20... (%)	0521	0.0003	0.0000				1			0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0494	0.0001	0.0000				1			0
261.99	Acid Soluble Manganese , Other (%)	0389	0.0001	0.0000				2			0
261.99	Acid Soluble Manganese , Other (%)	0524	0.0001	0.0000				2			0
281.30	Acid Soluble Mercury , ICP (ppm)	0394	0.0020	0.0020				2			0
281.30	Acid Soluble Mercury , ICP (ppm)	0519	0.0100	0.0000				2			0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0000	0.0000				2			4
281.99	Acid Soluble Mercury , Other (ppm)	0042	0.1620	0.0760				1			0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0524	0.0450	0.0026	2.803	4.753	0.0262	3	-0.58	49%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0102	0.0720	0.0760	2.803	4.753	0.0262	3	-0.57	49%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0521	8.292	0.0000	2.803	4.753	0.0262	3	1.15	98%	0
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (ppm)	0394	0.0730	0.0080				1			0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0494	0.0879	0.0316				2			0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0515	6.082	6.517				2			0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (ppm)	0515	3.975	1.380				1			0
289.99	Acid Soluble Molybdenum , Other (ppm)	0042	0.1110	0.0080				1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0521	0.1495	0.0000	0.2991	0.1390	0.0462	4	-1.08	25%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0524	0.2669	0.0049	0.2991	0.1390	0.0462	4	-0.23	5%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0519	0.2950	0.0100	0.2991	0.1390	0.0462	4	-0.03	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0394	0.4850	0.1700	0.2991	0.1390	0.0462	4	1.34	31%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0515	6.443	5.312				1			0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	4.927	1.208				1			0
291.99	Acid Soluble Nickel , Other (ppm)	0042	0.3105	0.0670				2			0
291.99	Acid Soluble Nickel , Other (ppm)	0481	19.90	0.0000				2			0
301.30	Acid Soluble Selenium , ICP (ppm)	0519	0.2750	0.0100				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				
301.30	Acid Soluble Selenium , ICP (ppm)	0524	0.4418	0.0185				2			0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified...	0515	5.178	8.908				1			0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	0515	3.171	0.2330				1			0
301.99	Acid Soluble Selenium , Other (ppm)	0042	0.0280	0.0140				1			0
311.32	Sodium, ICP, 2006.03 test portion (%)	0025	0.0253	0.0010				2			0
311.32	Sodium, ICP, 2006.03 test portion (%)	0521	0.0273	0.0000				2			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0494	0.0224	0.0004	0.0268	0.0054	0.0060	4	-0.81	8%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0423	0.0240	0.0020	0.0268	0.0054	0.0060	4	-0.51	5%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0102	0.0262	0.0007	0.0268	0.0054	0.0060	4	-0.11	1%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0035	0.0345	0.0210	0.0268	0.0054	0.0060	4	1.44	14%	0
311.99	Sodium, Other (%)	0482	0.0250	0.0100	0.0492	0.0376	0.0037	3	-0.64	25%	0
311.99	Sodium, Other (%)	0096	0.0300	0.0000	0.0492	0.0376	0.0037	3	-0.51	19%	0
311.99	Sodium, Other (%)	0354	0.0925	0.0010	0.0492	0.0376	0.0037	3	1.15	44%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0105	0.0006	0.0004	0.0011	0.0006	0.0002	4	-0.81	23%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0485	0.0009	0.0001	0.0011	0.0006	0.0002	4	-0.40	11%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0043	0.0010	0.0003	0.0011	0.0006	0.0002	4	-0.24	7%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0481	0.0020	0.0000	0.0011	0.0006	0.0002	4	1.46	41%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan...	0230	0.0001	0.0000	0.0025	0.0019	0.0002	5	-1.27	48%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan...	0433	0.0012	0.0010	0.0025	0.0019	0.0002	5	-0.70	26%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan...	0096	0.0031	0.0000	0.0025	0.0019	0.0002	5	0.30	11%	0
321.3	Acid Soluble Zinc , ICP, test portion inorgan...	483	0.0033	0.0001	0.0025	0.0019	0.0002	5	0.38	0.14229249	0
321.3	Acid Soluble Zinc , ICP, test portion inorgan...	354	0.0050	0.0000	0.0025	0.0019	0.0002	5	1.29	0.48814229	0
321.32	Acid Soluble Zinc , ICP, test portion 2006.03...	521	0.0028	0.0000				2			0
321.32	Acid Soluble Zinc , ICP, test portion 2006.03...	394	25.40	15.60				2			0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03...	515	0.0009	0.0002				2			0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03...	37	0.0019	0.0002				2			0
321.99	Acid Soluble Zinc , Other (%)	524	0.0001	0.0000	0.4214	0.8424	0.1275	4	-0.50	0.49988136	0
321.99	Acid Soluble Zinc , Other (%)	389	0.0003	0.0001	0.4214	0.8424	0.1275	4	-0.50	0.4997034	0
321.99	Acid Soluble Zinc , Other (%)	515	0.0004	0.0000	0.4214	0.8424	0.1275	4	-0.50	0.49952543	0
321.99	Acid Soluble Zinc , Other (%)	42	1.685	0.5100	0.4214	0.8424	0.1275	4	1.50	1.49911019	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 asterix 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.