

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

# Methods: 130

Sample # 161211

Statistical Summary

# Labs Reporting: 87

MAP plus S

Issue Date : 01/31/2017

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 (%)	11	11	11.79	0.3314	11.79		0.3670	0.1383	3.11%		0.1281	2.76%
001.99	Ammoniacal Nitrogen, Other (%)	16	16	11.97	0.4047	11.93		0.3598	0.1124	3.02%		0.0572	2.75%
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	2	2	11.91	0.3818								
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	2	2	11.91	0.2652								
010.11	Total Nitrogen, Modified Comprehensive (12%)	6	6	12.04	0.4270	12.02	0.6106	0.4358	0.2224	3.63%	2.54%	0.0772	2.75%
010.17	Total Nitrogen, Comprehensive (12%)	1		12.02									
010.60	Total Nitrogen, Combustion (12%)	59	57	11.88	1.495	12.07	0.6106	0.1876	0.0311	1.55%	2.53%	0.1024	2.75%
010.99	Total Nitrogen, Other (12%)	9	9	11.97	0.7393	12.08	0.6106	0.3274	0.1364	2.71%	2.53%	0.0698	2.75%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ... (%)	7	7	42.32	0.3932	42.35		0.3753	0.1773	0.89%		0.2200	2.28%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	17	16	42.05	1.018	42.09		0.9962	0.3113	2.37%		0.2281	2.28%
020.30	Total Phosphorus as P2O5, Alkalimetric Quinolinium... (%)	1		41.92									
020.40	Total Phosphorus as P2O5, Automated (%)	4	4	42.04	0.2792	42.04		0.2792	0.1745	0.66%		0.4775	2.28%
020.50	Total Phosphorus as P2O5, ICP (%)	17	16	41.92	1.845	41.86		1.749	0.5467	4.18%		0.3673	2.28%
020.99	Total Phosphorus as P2O5, Other (%)	5	5	42.01	4.452	42.01		4.452	2.489	10.60%		0.4564	2.28%
030.20	Citrate Insoluble Phosphorus as P2O5, Spectrophoto... (%)	1		0.3005									
030.40	Citrate Insoluble Phosphorus as P2O5, Automated, t... (%)	1		0.1300									
040.20	Indirect Available Phosphorus as P2O5, Spectrophot... (40%)	1		42.55									
040.40	Indirect Available Phosphorus as P2O5, Automated (40%)	1		42.18									
040.99	Indirect Available Phosphorus as P2O5, Other (40%)	1		41.91									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q... (40%)	7	7	42.17	0.4109	42.17	0.9210	0.4659	0.2201	1.10%	1.09%	0.2406	2.28%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q... (40%)	5	5	41.92	0.9490	41.92	0.9210	0.9490	0.5305	2.26%	1.10%	0.1854	2.28%
041.21	Direct Available Phosphorus as P2O5, Spectrophotom... (40%)	1		39.85									
041.50	Direct Available Phosphorus as P2O5, ICP (40%)	7	7	40.98	0.6511	40.99	0.9210	0.7179	0.3392	1.75%	1.12%	0.4729	2.29%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (40%)	5	5	41.37	0.4595	41.37	0.9210	0.4595	0.2569	1.11%	1.11%	0.6040	2.28%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ... (40%)	14	14	41.18	0.9940	41.31	0.9210	0.7952	0.2657	1.93%	1.11%	0.2390	2.28%
041.99	Direct Available Phosphorus as P2O5, Other (40%)	5	5	41.07	1.191	41.07	0.9210	1.191	0.6660	2.90%	1.12%	0.2320	2.29%
042.99	Water Soluble Orthophosphate as P2O5, Other (%)	1		38.29									
048.10	Water Soluble Phosphorus as P2O5, Gravimetric Quin... (%)	1		38.07									
048.20	Water Soluble Phosphorus as P2O5, Spectrophotometr... (%)	6	6	34.78	8.044	37.37		2.189	1.117	5.86%		0.3132	2.32%
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	1		38.01									
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	2	2	39.83	2.691								

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
048.99	Water Soluble Phosphorus as P2O5, Other (%)	2	2	37.40	0.0672								
050.31	Soluble Potassium as K2O, AA (Citrate) (%)	1		0.0000									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (%)	1		0.1500									
050.51	Soluble Potassium as K2O, ICP (Citrate) (%)	1		0.5250									
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (%)	1		0.0000									
050.61	Soluble Potassium as K2O, Flame Photometric (Citra... (%)	1		10.38									
050.99	Soluble Potassium as K2O, Other (%)	8	7	0.1184	0.0192	0.1197		0.0185	0.0087	15.45%		0.0053	5.51%
060.00	Water (Free), Vacuum Oven (%)	3	3	0.4753	0.1531	0.4753		0.1531	0.1105	32.21%		0.0473	4.47%
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 hours,... (%)	1		0.8515									
060.99	Water (Free), Other (%)	1		0.5661									
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	1		0.1423									
101.03	Acid Soluble Calcium, AA, 965.09, test portion 200... (%)	1		0.1447									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	7	6	0.2232	0.0603	0.2236		0.0673	0.0343	30.10%		0.0073	5.01%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C (%)	1		0.2545									
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (	4	4	0.2378	0.0127	0.2378		0.0127	0.0079	5.33%		0.0026	4.97%
101.99	Acid Soluble Calcium, Other (%)	1		0.2350									
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (%)	1		0.3890									
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2... (	1		0.3978									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (	6	6	0.5308	0.0939	0.5234		0.0886	0.0452	16.94%		0.0250	4.41%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A... (	1		0.5310									
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (	4	4	0.5232	0.0186	0.5232		0.0186	0.0116	3.56%		0.0067	4.41%
121.99	Acid Soluble Magnesium, Other (%)	2	2	0.5343	0.0251								
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon disu... (%)	4	4	4.864	0.2532	4.864		0.2532	0.1582	5.21%		0.0625	3.15%
143.99	Elemental Sulfur, Other (%)	3	3	8.187	2.921	8.187		2.921	2.108	35.68%		0.1600	2.91%
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - ... (%)	5	5	5.048	0.2959	5.048		0.2959	0.1654	5.86%		0.1400	3.13%
145.99	Sulfate Sulfur, HCl soluble, Other (%)	2	2	6.035	1.711								
146.99	Total Sulfur in Liquid, Other (%)	1		9.550									
148.00	Total Sulfur, Combustion (10%)	7	7	10.18	0.4132	10.13	0.6746	0.3478	0.1643	3.43%	3.33%	0.1386	2.82%
148.01	Total Sulfur, Gravimetric - sulfate and elemental... (10	12	12	8.458	2.035	8.478	0.6746	2.266	0.8175	26.72%	3.98%	0.1904	2.90%
148.04	Total Sulfur, ICP, w/Br digestion (10%)	1		4.500									
148.07	Total Sulfur, ICP, test portion as in 2006.03 modi... (10	12	11	9.070	1.667	9.344	0.6746	1.106	0.4168	11.84%	3.61%	0.2068	2.86%
148.99	Total Sulfur, Other (10%)	10	10	8.880	2.368	9.630	0.6746	0.9522	0.3764	9.89%	3.50%	0.1588	2.84%
149.04	Sulfur - HNO3 soluble, ICP (%)	5	5	7.441	2.215	7.441		2.215	1.238	29.77%		0.1562	2.96%
151.00	Acid Soluble Arsenic , AA, test portion as in 2006... (p	1		11.80									
151.30	Acid Soluble Arsenic , ICP (ppm)	4	4	10.40	2.049	10.40		2.049	1.281	19.70%		0.7675	11.24%
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified w/9:3... (	6	6	10.77	1.513	10.77		1.716	0.8756	15.94%		0.7382	11.19%
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	1		10.82									
151.99	Acid Soluble Arsenic , Other (ppm)	2	2	10.44	3.306								
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (%)	3	3	0.0141	0.0096	0.0141		0.0096	0.0069	67.70%		0.0011	7.59%
165.99	Acid Soluble Boron , Other (%)	6	5	0.0071	0.0041	0.0071		0.0041	0.0023	58.51%		0.0001	8.43%
181.00	Acid Soluble Cadmium , AA, test portion as in 2006... (	2	2	2.823	0.0389								
181.30	Acid Soluble Cadmium , ICP (ppm)	9	8	2.510	0.4671	2.452		0.3278	0.1449	13.37%		0.0156	13.98%

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181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9:3..	5	5	2.519	0.3562	2.519		0.3562	0.1991	14.14%		0.1332	13.92%
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	2	1	2.190									
181.99	Acid Soluble Cadmium , Other (ppm)	1		2.350									
191.30	Acid Soluble Chromium , ICP (ppm)	8	8	67.72	12.07	69.94		7.771	3.434	11.11%		2.165	8.44%
191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9:...	6	5	67.28	5.281	67.28		5.281	2.952	7.85%		1.793	8.49%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppn)	2	2	68.95	4.170								
191.99	Acid Soluble Chromium , Other (ppm)	2	2	63.60	20.29								
202.30	Acid Soluble Cobalt , ICP (ppm)	7	6	2.489	0.8522	2.489		0.9664	0.4932	38.82%		0.0961	13.94%
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3 ... (f	5	5	2.048	0.9294	2.048		0.9294	0.5196	45.39%		0.1915	14.36%
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	1		0.0000									
202.99	Acid Soluble Cobalt , Other (ppm)	1		2.810									
221.30	Acid Soluble Copper , ICP, test portion inorganic ... (%)	5	3	0.2985	0.5122	0.2985		0.5122	0.3697	171.58%		0.1001	4.80%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-C (%)	2	1	0.0002									
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-C... (	2	1	0.0004									
221.99	Acid Soluble Copper , Other (%)	3	2	2.553	3.609	2.553		3.609	3.190	141.40%		0.0151	3.47%
241.00	Acid Soluble Iron, AA, inorganic 965.09 (%)	1		0.8372									
241.03	Acid Soluble Iron, AA, 965.09, test portion 2006.0... (%)	1		0.7695									
241.30	Acid Soluble Iron, ICP, test portion inorganic 965... (%)	8	8	0.7348	0.3095	0.8075		0.1471	0.0650	18.21%		0.0304	4.13%
241.32	Acid Soluble Iron, ICP, test portion 2006.03A-C (%)	1		0.8473									
241.33	Acid Soluble Iron, ICP, test portion 2006.03A-C, w... (%)	4	4	0.8432	0.0433	0.8432		0.0432	0.0270	5.13%		0.0120	4.10%
241.99	Acid Soluble Iron, Other (%)	2	2	0.8933	0.0181								
251.30	Acid Soluble Lead , ICP (ppm)	5	4	2.191	1.309	2.191		1.309	0.8183	59.75%		0.1468	14.22%
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 HN...	4	4	1.941	1.604	1.941		1.604	1.003	82.66%		0.8202	14.48%
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	1		0.0000									
251.99	Acid Soluble Lead , Other (ppm)	1		1.375									
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	1		0.0291									
261.15	Acid Soluble Manganese , AA, 965.09, test portion ... (	1		0.0290									
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (%)	4	4	0.0287	0.0025	0.0287		0.0025	0.0016	8.77%		0.0007	6.82%
261.31	Acid Soluble Manganese , ICP, test portion 972.02b (%)	1		0.0300									
261.32	Acid Soluble Manganese , ICP, test portion inorgan... (	2	2	0.0340	0.0056								
261.34	Acid Soluble Manganese , ICP, test portion 2006.03...	1		0.0309									
261.35	Acid Soluble Manganese , ICP, test portion 2006.03...	4	4	0.0300	0.0020	0.0300		0.0020	0.0013	6.73%		0.0016	6.78%
261.99	Acid Soluble Manganese , Other (%)	2	2	0.0307	0.0008								
281.30	Acid Soluble Mercury , ICP (ppm)	3	3	14.04	24.14	14.04		24.14	17.42	171.94%		0.0629	10.75%
281.99	Acid Soluble Mercury , Other (ppm)	1		0.0200									
289.30	Acid Soluble Molybdenum , ICP (ppm)	7	7	10.92	1.558	10.92		1.767	0.8347	16.18%		0.6593	11.16%
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (ppm)	1		10.90									
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w/..	6	5	12.39	0.8321	12.39		0.8321	0.4652	6.72%		0.2023	10.95%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (p	2	2	9.916	1.958								
289.99	Acid Soluble Molybdenum , Other (ppm)	2	2	8.805	1.690								
291.00	Acid Soluble Nickel , AA, test portion as in 2006.... (pp	1		10.50									
291.30	Acid Soluble Nickel , ICP (ppm)	10	10	10.43	0.9648	10.59		0.6764	0.2674	6.39%		0.3381	11.22%

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
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3 ... (µ	6	5	11.17	0.4217	11.17		0.4217	0.2357	3.78%		0.2266	11.13%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	2	2	9.137	1.927								
291.99	Acid Soluble Nickel , Other (ppm)	1		12.30									
301.30	Acid Soluble Selenium , ICP (ppm)	3	2	0.5812	0.4225	0.5812		0.4225	0.3735	72.70%		0.0154	17.36%
301.33	Acid Soluble Selenium , ICP, 2006.03 modified w/9:...	2	2	2.075	2.751								
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	1		0.0000									
301.99	Acid Soluble Selenium , Other (ppm)	1		0.0100									
311.32	Sodium, ICP, 2006.03 test portion (%)	1		0.1159									
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test .	3	3	0.1203	0.0084	0.1203		0.0084	0.0061	7.00%		0.0087	5.50%
311.99	Sodium, Other (%)	3	3	0.1353	0.0186	0.1353		0.0186	0.0134	13.73%		0.0033	5.40%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	2	2	0.0103	0.0001								
321.30	Acid Soluble Zinc , ICP, test portion inorganic 96... (%)	11	10	13.21	41.72	0.0129		0.0036	0.0014	28.07%		0.7705	7.70%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C (%)	2	2	0.0117	0.0010								
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, ... (%)	7	6	0.0113	0.0014	0.0113		0.0016	0.0008	14.32%		0.0019	7.86%
321.99	Acid Soluble Zinc , Other (%)	8	7	0.0169	0.0192	0.0109		0.0025	0.0012	22.99%		0.0000	7.89%

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 161211

### Method Precision Report

MAP plus S

Issue Date : 01/31/2017

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 (%)	11	11	11.79	0.3314	0.3178	0.1328	0.3444	2.70%	1.13%	2.92%	2.593
001.99	Ammoniacal Nitrogen, Other (%)	16	15	11.90	0.3191	0.3173	0.0478	0.3208	2.67%	0.40%	2.70%	6.717
010.60	Total Nitrogen, Combustion (12%)	59	54	12.07	0.2992	0.2916	0.0949	0.3066	2.42%	0.79%	2.54%	3.230
010.99	Total Nitrogen, Other (12%)	9	8	12.19	0.3469	0.3429	0.0751	0.3510	2.81%	0.62%	2.88%	4.675
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	17	16	42.05	1.018	1.003	0.2453	1.033	2.39%	0.58%	2.46%	4.211
020.50	Total Phosphorus as P2O5, ICP (%)	17	15	41.80	1.853	1.842	0.2767	1.863	4.41%	0.66%	4.46%	6.734
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (40%)	14	13	41.39	0.6544	0.6384	0.2035	0.6701	1.54%	0.49%	1.62%	3.292
148.01	Total Sulfur, Gravimetric - sulfate and elemental (10%)	12	12	8.458	2.035	2.030	0.1940	2.040	24.00%	2.29%	24.11%	10.51
148.07	Total Sulfur, ICP, test portion as in 2006.03 modified w/9:3 HNO3:HCl (10%)	12	9	9.574	0.8739	0.8719	0.0845	0.8760	9.11%	0.88%	9.15%	10.37
148.99	Total Sulfur, Other (10%)	10	10	8.880	2.368	2.365	0.1567	2.371	26.64%	1.76%	26.70%	15.13
291.30	Acid Soluble Nickel, ICP (ppm)	10	9	10.70	0.5073	0.4619	0.2964	0.5489	4.32%	2.77%	5.13%	1.852
321.30	Acid Soluble Zinc, ICP, test portion inorganic 965.09 (%)	11	9	0.0218	0.0307	0.0307	0.0008	0.0307	141.00%	3.55%	141.05%	39.75

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: 130

Sample # 161211

Lab Values

# Labs Reporting: 87

MAP plus S

Issue Date : 01/31/2017

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	11.20	0.4000	11.79	0.3670	0.1281	11	-1.52	3%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0513	11.36	0.1000	11.79	0.3670	0.1281	11	-1.11	2%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0231	11.58	0.0300	11.79	0.3670	0.1281	11	-0.56	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0177	11.61	0.0268	11.79	0.3670	0.1281	11	-0.46	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0444	11.67	0.0800	11.79	0.3670	0.1281	11	-0.32	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0526	11.87	0.0000	11.79	0.3670	0.1281	11	0.19	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0486	11.98	0.1500	11.79	0.3670	0.1281	11	0.46	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0405	11.99	0.0320	11.79	0.3670	0.1281	11	0.50	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0389	12.08	0.1600	11.79	0.3670	0.1281	11	0.73	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0309	12.17	0.0300	11.79	0.3670	0.1281	11	0.94	2%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0498	12.20	0.4000	11.79	0.3670	0.1281	11	1.03	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0513	11.33	0.0300	11.93	0.3598	0.0572	16	-1.69	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0394	11.45	0.1000	11.93	0.3598	0.0572	16	-1.34	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0524	11.64	0.0400	11.93	0.3598	0.0572	16	-0.82	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0027	11.73	0.0200	11.93	0.3598	0.0572	16	-0.57	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0510	11.80	0.0549	11.93	0.3598	0.0572	16	-0.37	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0420	11.82	0.0100	11.93	0.3598	0.0572	16	-0.33	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0368	11.82	0.1200	11.93	0.3598	0.0572	16	-0.32	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0487	11.84	0.1400	11.93	0.3598	0.0572	16	-0.26	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0519	11.90	0.0500	11.93	0.3598	0.0572	16	-0.11	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0520	12.00	0.0100	11.93	0.3598	0.0572	16	0.17	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0371	12.05	0.1000	11.93	0.3598	0.0572	16	0.32	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0220	12.11	0.0500	11.93	0.3598	0.0572	16	0.48	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0522	12.22	0.0500	11.93	0.3598	0.0572	16	0.78	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	12.24	0.0200	11.93	0.3598	0.0572	16	0.85	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0501	12.59	0.0207	11.93	0.3598	0.0572	16	1.83	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	12.95	0.1000	11.93	0.3598	0.0572	16	2.83	4%	0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0309	11.64	0.0400				2			0
009.10	Ammoniacal Plus Nitrate Nitrogen, Devarda (%)	0444	12.18	0.2600				2			0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0513	11.73	0.1700				2			0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0518	12.10	0.0400				2			0
010.11	Total Nitrogen, Modified Comprehensive (12%)	0309	11.61	0.0400	12.02	0.4358	0.0772	6	-0.84	2%	0
010.11	Total Nitrogen, Modified Comprehensive (12%)	0500	11.67	0.0500	12.02	0.4358	0.0772	6	-0.73	1%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.11	Total Nitrogen, Modified Comprehensive (12%)	0211	11.99	0.0500	12.02	0.4358	0.0772	6	-0.08	0%	0
010.11	Total Nitrogen, Modified Comprehensive (12%)	0090	12.07	0.1400	12.02	0.4358	0.0772	6	0.10	0%	0
010.11	Total Nitrogen, Modified Comprehensive (12%)	0105	12.13	0.0300	12.02	0.4358	0.0772	6	0.21	0%	0
010.11	Total Nitrogen, Modified Comprehensive (12%)	0510	12.80	0.1533	12.02	0.4358	0.0772	6	1.59	3%	0
010.17	Total Nitrogen, Comprehensive (12%)	0220	12.02	0.0600				1			0
010.60	Total Nitrogen, Combustion (12%)	0402	1.004*	0.0020	12.07	0.1876	0.1024	57	-58.97	46%	0
010.60	Total Nitrogen, Combustion (12%)	0521	10.83*	0.0000	12.07	0.1876	0.1024	57	-6.62	5%	0
010.60	Total Nitrogen, Combustion (12%)	0034	11.64	0.0000	12.07	0.1876	0.1024	57	-2.28	2%	0
010.60	Total Nitrogen, Combustion (12%)	0527	11.67	0.1200	12.07	0.1876	0.1024	57	-2.12	2%	0
010.60	Total Nitrogen, Combustion (12%)	0291	11.73	0.0000	12.07	0.1876	0.1024	57	-1.80	1%	0
010.60	Total Nitrogen, Combustion (12%)	0368	11.77	0.1560	12.07	0.1876	0.1024	57	-1.58	1%	0
010.60	Total Nitrogen, Combustion (12%)	0007	11.80	0.2000	12.07	0.1876	0.1024	57	-1.43	1%	0
010.60	Total Nitrogen, Combustion (12%)	0354	11.82	0.0890	12.07	0.1876	0.1024	57	-1.31	1%	0
010.60	Total Nitrogen, Combustion (12%)	0041	11.84	0.0100	12.07	0.1876	0.1024	57	-1.24	1%	0
010.60	Total Nitrogen, Combustion (12%)	0356	11.84	0.2000	12.07	0.1876	0.1024	57	-1.21	1%	0
010.60	Total Nitrogen, Combustion (12%)	0472	11.89	0.0100	12.07	0.1876	0.1024	57	-0.97	1%	0
010.60	Total Nitrogen, Combustion (12%)	0095	11.91	0.0700	12.07	0.1876	0.1024	57	-0.87	1%	0
010.60	Total Nitrogen, Combustion (12%)	0489	11.93	0.0600	12.07	0.1876	0.1024	57	-0.74	1%	0
010.60	Total Nitrogen, Combustion (12%)	0027	11.95	0.3000	12.07	0.1876	0.1024	57	-0.63	0%	0
010.60	Total Nitrogen, Combustion (12%)	0451	11.96	0.1600	12.07	0.1876	0.1024	57	-0.58	0%	0
010.60	Total Nitrogen, Combustion (12%)	0406	11.98	0.4100	12.07	0.1876	0.1024	57	-0.50	0%	0
010.60	Total Nitrogen, Combustion (12%)	0043	11.99	0.0100	12.07	0.1876	0.1024	57	-0.44	0%	0
010.60	Total Nitrogen, Combustion (12%)	0042	12.00	0.0000	12.07	0.1876	0.1024	57	-0.36	0%	0
010.60	Total Nitrogen, Combustion (12%)	0523	12.00	0.0000	12.07	0.1876	0.1024	57	-0.36	0%	0
010.60	Total Nitrogen, Combustion (12%)	0485	12.01	0.1960	12.07	0.1876	0.1024	57	-0.33	0%	0
010.60	Total Nitrogen, Combustion (12%)	0486	12.01	0.2200	12.07	0.1876	0.1024	57	-0.31	0%	0
010.60	Total Nitrogen, Combustion (12%)	0421	12.03	0.0500	12.07	0.1876	0.1024	57	-0.23	0%	0
010.60	Total Nitrogen, Combustion (12%)	0073	12.03	0.2000	12.07	0.1876	0.1024	57	-0.20	0%	0
010.60	Total Nitrogen, Combustion (12%)	0023	12.04	0.0050	12.07	0.1876	0.1024	57	-0.14	0%	0
010.60	Total Nitrogen, Combustion (12%)	0230	12.05	0.1000	12.07	0.1876	0.1024	57	-0.10	0%	0
010.60	Total Nitrogen, Combustion (12%)	0037	12.05	0.1010	12.07	0.1876	0.1024	57	-0.08	0%	0
010.60	Total Nitrogen, Combustion (12%)	0525	12.08	0.3580	12.07	0.1876	0.1024	57	0.04	0%	0
010.60	Total Nitrogen, Combustion (12%)	0360	12.10	0.0500	12.07	0.1876	0.1024	57	0.14	0%	0
010.60	Total Nitrogen, Combustion (12%)	0157	12.10	0.0000	12.07	0.1876	0.1024	57	0.17	0%	0
010.60	Total Nitrogen, Combustion (12%)	0482	12.10	0.0000	12.07	0.1876	0.1024	57	0.17	0%	0
010.60	Total Nitrogen, Combustion (12%)	0234	12.10	0.0600	12.07	0.1876	0.1024	57	0.17	0%	0
010.60	Total Nitrogen, Combustion (12%)	0028	12.13	0.0400	12.07	0.1876	0.1024	57	0.33	0%	0
010.60	Total Nitrogen, Combustion (12%)	0494	12.13	0.2400	12.07	0.1876	0.1024	57	0.33	0%	0
010.60	Total Nitrogen, Combustion (12%)	0444	12.14	0.3400	12.07	0.1876	0.1024	57	0.38	0%	0
010.60	Total Nitrogen, Combustion (12%)	0377	12.15	0.0100	12.07	0.1876	0.1024	57	0.41	0%	0
010.60	Total Nitrogen, Combustion (12%)	0072	12.15	0.1000	12.07	0.1876	0.1024	57	0.44	0%	0
010.60	Total Nitrogen, Combustion (12%)	0035	12.16	0.0400	12.07	0.1876	0.1024	57	0.49	0%	0
010.60	Total Nitrogen, Combustion (12%)	0231	12.16	0.0200	12.07	0.1876	0.1024	57	0.49	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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010.60	Total Nitrogen, Combustion (12%)	0452	12.16	0.0400	12.07	0.1876	0.1024	57	0.49	0%	0
010.60	Total Nitrogen, Combustion (12%)	0292	12.18	0.0200	12.07	0.1876	0.1024	57	0.60	0%	0
010.60	Total Nitrogen, Combustion (12%)	0136	12.19	0.0100	12.07	0.1876	0.1024	57	0.62	0%	0
010.60	Total Nitrogen, Combustion (12%)	0177	12.19	0.0300	12.07	0.1876	0.1024	57	0.62	0%	0
010.60	Total Nitrogen, Combustion (12%)	0260	12.19	0.5000	12.07	0.1876	0.1024	57	0.65	1%	0
010.60	Total Nitrogen, Combustion (12%)	0040	12.20	0.0000	12.07	0.1876	0.1024	57	0.70	1%	0
010.60	Total Nitrogen, Combustion (12%)	0516	12.20	0.0000	12.07	0.1876	0.1024	57	0.70	1%	0
010.60	Total Nitrogen, Combustion (12%)	0055	12.21	0.0200	12.07	0.1876	0.1024	57	0.76	1%	0
010.60	Total Nitrogen, Combustion (12%)	0096	12.21	0.0600	12.07	0.1876	0.1024	57	0.76	1%	0
010.60	Total Nitrogen, Combustion (12%)	0405	12.21	0.0560	12.07	0.1876	0.1024	57	0.76	1%	0
010.60	Total Nitrogen, Combustion (12%)	0422	12.22	0.0600	12.07	0.1876	0.1024	57	0.81	1%	0
010.60	Total Nitrogen, Combustion (12%)	0325	12.25	0.3000	12.07	0.1876	0.1024	57	0.97	1%	0
010.60	Total Nitrogen, Combustion (12%)	0389	12.26	0.1200	12.07	0.1876	0.1024	57	1.02	1%	0
010.60	Total Nitrogen, Combustion (12%)	0483	12.27	0.0100	12.07	0.1876	0.1024	57	1.05	1%	0
010.60	Total Nitrogen, Combustion (12%)	0307	12.29	0.1240	12.07	0.1876	0.1024	57	1.16	1%	0
010.60	Total Nitrogen, Combustion (12%)	0029	12.31	0.1300	12.07	0.1876	0.1024	57	1.26	1%	0
010.60	Total Nitrogen, Combustion (12%)	0025	12.41	0.0300	12.07	0.1876	0.1024	57	1.80	1%	0
010.60	Total Nitrogen, Combustion (12%)	0501	12.55	0.1000	12.07	0.1876	0.1024	57	2.57	2%	0
010.60	Total Nitrogen, Combustion (12%)	0443	13.30	0.3000	12.07	0.1876	0.1024	57	6.57	5%	0
010.60	Total Nitrogen, Combustion (12%)	0324	11.70	0.6000	12.07	0.1876	0.1024	57	-1.96	2%	1
010.60	Total Nitrogen, Combustion (12%)	0131	32.67	0.1150	12.07	0.1876	0.1024	57	109.82	85%	2
010.99	Total Nitrogen, Other (12%)	0526	10.20*	0.0000	12.08	0.3274	0.0698	9	-5.31	8%	0
010.99	Total Nitrogen, Other (12%)	0487	11.90	0.0000	12.08	0.3274	0.0698	9	-0.52	1%	0
010.99	Total Nitrogen, Other (12%)	0519	11.91	0.0200	12.08	0.3274	0.0698	9	-0.49	1%	0
010.99	Total Nitrogen, Other (12%)	0420	11.98	0.1700	12.08	0.3274	0.0698	9	-0.31	0%	0
010.99	Total Nitrogen, Other (12%)	0493	12.10	0.1000	12.08	0.3274	0.0698	9	0.04	0%	0
010.99	Total Nitrogen, Other (12%)	0524	12.11	0.0278	12.08	0.3274	0.0698	9	0.08	0%	0
010.99	Total Nitrogen, Other (12%)	0498	12.20	0.2000	12.08	0.3274	0.0698	9	0.33	0%	0
010.99	Total Nitrogen, Other (12%)	0520	12.40	0.0100	12.08	0.3274	0.0698	9	0.88	1%	0
010.99	Total Nitrogen, Other (12%)	0506	12.95	0.1000	12.08	0.3274	0.0698	9	2.44	4%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0500	41.58	0.0100	42.35	0.3753	0.2200	7	-1.86	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0157	42.05	0.3000	42.35	0.3753	0.2200	7	-0.71	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0090	42.34	0.1400	42.35	0.3753	0.2200	7	-0.01	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0211	42.45	0.2000	42.35	0.3753	0.2200	7	0.25	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0493	42.45	0.1000	42.35	0.3753	0.2200	7	0.25	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0444	42.58	0.6600	42.35	0.3753	0.2200	7	0.57	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0105	42.77	0.1300	42.35	0.3753	0.2200	7	1.01	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0420	39.75	0.3000	42.09	0.9962	0.2281	16	-2.35	3%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	40.71	0.0600	42.09	0.9962	0.2281	16	-1.38	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0406	40.80	0.0800	42.09	0.9962	0.2281	16	-1.29	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0027	41.28	0.0110	42.09	0.9962	0.2281	16	-0.81	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0457	41.64	0.6300	42.09	0.9962	0.2281	16	-0.46	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0489	41.80	0.0000	42.09	0.9962	0.2281	16	-0.29	0%	0



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020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0394	42.15	0.1000	42.09	0.9962	0.2281	16	0.06	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	42.18	0.0500	42.09	0.9962	0.2281	16	0.09	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0516	42.40	0.4000	42.09	0.9962	0.2281	16	0.31	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	42.52	0.3400	42.09	0.9962	0.2281	16	0.43	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0506	42.60	0.8000	42.09	0.9962	0.2281	16	0.51	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	42.64	0.0299	42.09	0.9962	0.2281	16	0.55	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	42.74	0.0200	42.09	0.9962	0.2281	16	0.65	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	42.85	0.0890	42.09	0.9962	0.2281	16	0.76	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	42.95	0.7000	42.09	0.9962	0.2281	16	0.86	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0300	43.82	0.0400	42.09	0.9962	0.2281	16	1.74	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0428	54.20	14.98	42.09	0.9962	0.2281	16	12.16	14%	1
020.30	Total Phosphorus as P2O5, Alkalimetric Quinol... (%)	0489	41.92	0.0300				1			0
020.40	Total Phosphorus as P2O5, Automated (%)	0042	41.65	0.3000	42.04	0.2792	0.4775	4	-1.40	0%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0035	42.08	1.300	42.04	0.2792	0.4775	4	0.14	0%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0105	42.13	0.2300	42.04	0.2792	0.4775	4	0.30	0%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0096	42.31	0.0800	42.04	0.2792	0.4775	4	0.96	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0157	38.70	0.4000	41.86	1.749	0.3673	16	-1.81	4%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0527	39.03	0.6000	41.86	1.749	0.3673	16	-1.62	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0521	40.54	0.0000	41.86	1.749	0.3673	16	-0.76	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	40.79	0.6500	41.86	1.749	0.3673	16	-0.61	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	41.14	0.4700	41.86	1.749	0.3673	16	-0.41	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0433	41.30	0.1100	41.86	1.749	0.3673	16	-0.32	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0523	41.30	0.2000	41.86	1.749	0.3673	16	-0.32	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	41.60	0.3200	41.86	1.749	0.3673	16	-0.15	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0368	41.89	0.7441	41.86	1.749	0.3673	16	0.02	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	42.41	0.2500	41.86	1.749	0.3673	16	0.31	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0421	42.53	0.0500	41.86	1.749	0.3673	16	0.38	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0402	42.54	0.2700	41.86	1.749	0.3673	16	0.39	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	43.03	0.0500	41.86	1.749	0.3673	16	0.67	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	43.60	1.200	41.86	1.749	0.3673	16	0.99	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0524	44.17	0.5322	41.86	1.749	0.3673	16	1.32	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0422	46.12	0.0300	41.86	1.749	0.3673	16	2.43	5%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	47.78	4.810	41.86	1.749	0.3673	16	3.38	7%	1
020.99	Total Phosphorus as P2O5, Other (%)	0443	36.37	0.4200	42.01	4.452	0.4564	5	-1.27	7%	0
020.99	Total Phosphorus as P2O5, Other (%)	0520	40.97	0.9400	42.01	4.452	0.4564	5	-0.23	1%	0
020.99	Total Phosphorus as P2O5, Other (%)	0513	41.42	0.0900	42.01	4.452	0.4564	5	-0.13	1%	0
020.99	Total Phosphorus as P2O5, Other (%)	0487	42.50	0.3400	42.01	4.452	0.4564	5	0.11	1%	0
020.99	Total Phosphorus as P2O5, Other (%)	0515	48.78	0.4921	42.01	4.452	0.4564	5	1.52	8%	0
030.20	Citrate Insoluble Phosphorus as P2O5, Spectro... (%)	0405	0.3005	0.0090				1			0
030.40	Citrate Insoluble Phosphorus as P2O5, Automat... (%)	0096	0.1300	0.0000				1			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (40%)	0405	42.55	0.0980				1			0
040.40	Indirect Available Phosphorus as P2O5, Automa... (40%)	0096	42.18	0.0800				1			0
040.99	Indirect Available Phosphorus as P2O5, Other (40%)	0394	41.91	0.1260				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				
041.10	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0041	41.72	0.3000	42.17	0.4659	0.2406	7	-0.88	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0177	41.74	0.0902	42.17	0.4659	0.2406	7	-0.84	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0072	41.86	0.2440	42.17	0.4659	0.2406	7	-0.61	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0055	42.18	0.1400	42.17	0.4659	0.2406	7	0.01	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0040	42.40	0.0000	42.17	0.4659	0.2406	7	0.44	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0105	42.66	0.4700	42.17	0.4659	0.2406	7	0.93	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0494	42.66	0.4400	42.17	0.4659	0.2406	7	0.94	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0513	40.50	0.2800	41.92	0.9490	0.1854	5	-1.50	2%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0185	41.67	0.3700	41.92	0.9490	0.1854	5	-0.27	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0220	41.88	0.0100	41.92	0.9490	0.1854	5	-0.05	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0485	42.68	0.2470	41.92	0.9490	0.1854	5	0.80	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (40%)	0105	42.89	0.0200	41.92	0.9490	0.1854	5	1.02	1%	0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (40%)	0522	39.85*	0.5000				1			0
041.50	Direct Available Phosphorus as P2O5, ICP (40%)	0007	39.85*	1.300	40.99	0.7179	0.4729	7	-1.44	1%	0
041.50	Direct Available Phosphorus as P2O5, ICP (40%)	0291	40.68	0.0100	40.99	0.7179	0.4729	7	-0.40	0%	0
041.50	Direct Available Phosphorus as P2O5, ICP (40%)	0368	40.82	0.5000	40.99	0.7179	0.4729	7	-0.21	0%	0
041.50	Direct Available Phosphorus as P2O5, ICP (40%)	0117	41.06	0.0400	40.99	0.7179	0.4729	7	0.09	0%	0
041.50	Direct Available Phosphorus as P2O5, ICP (40%)	0452	41.14	0.0800	40.99	0.7179	0.4729	7	0.19	0%	0
041.50	Direct Available Phosphorus as P2O5, ICP (40%)	0325	41.35	1.300	40.99	0.7179	0.4729	7	0.45	0%	0
041.50	Direct Available Phosphorus as P2O5, ICP (40%)	0072	41.97	0.0800	40.99	0.7179	0.4729	7	1.23	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (40%)	0360	40.64	0.2600	41.37	0.4595	0.6040	5	-1.58	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (40%)	0494	41.31	0.0600	41.37	0.4595	0.6040	5	-0.12	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (40%)	0377	41.40	0.0300	41.37	0.4595	0.6040	5	0.06	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (40%)	0023	41.62	0.7800	41.37	0.4595	0.6040	5	0.55	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (40%)	0025	41.87	1.890	41.37	0.4595	0.6040	5	1.09	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0472	38.51*	0.1600	41.31	0.7952	0.2390	14	-3.52	3%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0354	40.01*	0.2050	41.31	0.7952	0.2390	14	-1.63	2%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0029	40.56	0.3000	41.31	0.7952	0.2390	14	-0.94	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0073	40.95	0.5500	41.31	0.7952	0.2390	14	-0.46	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0486	41.08	0.2500	41.31	0.7952	0.2390	14	-0.29	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0037	41.10	0.0970	41.31	0.7952	0.2390	14	-0.26	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0231	41.41	0.0500	41.31	0.7952	0.2390	14	0.12	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0177	41.55	0.3733	41.31	0.7952	0.2390	14	0.30	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0230	41.55	0.3000	41.31	0.7952	0.2390	14	0.31	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0055	41.60	0.4000	41.31	0.7952	0.2390	14	0.37	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0105	41.93	0.3900	41.31	0.7952	0.2390	14	0.78	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0043	41.94	0.0500	41.31	0.7952	0.2390	14	0.79	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0136	41.97	0.1100	41.31	0.7952	0.2390	14	0.83	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (40%)	0034	42.46	0.1100	41.31	0.7952	0.2390	14	1.45	1%	0
041.99	Direct Available Phosphorus as P2O5, Other (40%)	0518	40.07*	0.0600	41.07	1.191	0.2320	5	-0.84	1%	0
041.99	Direct Available Phosphorus as P2O5, Other (40%)	0519	40.13*	0.0900	41.07	1.191	0.2320	5	-0.79	1%	0
041.99	Direct Available Phosphorus as P2O5, Other (40%)	0526	40.46*	0.0000	41.07	1.191	0.2320	5	-0.51	1%	0
041.99	Direct Available Phosphorus as P2O5, Other (40%)	0105	42.11	0.2100	41.07	1.191	0.2320	5	0.87	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				
041.99	Direct Available Phosphorus as P2O5, Other (40%)	0506	42.60	0.8000	41.07	1.191	0.2320	5	1.28	2%	0
042.99	Water Soluble Orthophosphate as P2O5, Other (%)	0368	38.29	0.1444				1			0
048.10	Water Soluble Phosphorus as P2O5, Gravimetric... (%)	0444	38.07	0.5400				1			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0230	18.50	1.000	37.37	2.189	0.3132	6	-7.68	25%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0420	36.86	0.3200	37.37	2.189	0.3132	6	-0.21	1%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0220	37.69	0.0200	37.37	2.189	0.3132	6	0.13	0%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0405	37.75	0.0390	37.37	2.189	0.3132	6	0.15	1%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0394	37.80	0.0000	37.37	2.189	0.3132	6	0.17	1%	0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0498	40.05	0.5000	37.37	2.189	0.3132	6	1.09	4%	0
048.40	Water Soluble Phosphorus as P2O5, Automated (%)	0096	38.01	0.0300				1			0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0444	37.93	0.3300				2			0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0501	41.73	1.402				2			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0513	37.35	0.0600				2			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0520	37.45	0.0100				2			0
050.31	Soluble Potassium as K2O, AA (Citrate) (%)	0472	0.0000	0.0000				0			4
050.50	Soluble Potassium as K2O, ICP (Oxalate) (%)	0292	0.1500	0.0000				1			0
050.51	Soluble Potassium as K2O, ICP (Citrate) (%)	0483	0.5250	0.0500				1			0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (%)	0354	0.0000	0.0000				0			4
050.61	Soluble Potassium as K2O, Flame Photometric (... (%)	0131	10.38	0.0000				1			0
050.99	Soluble Potassium as K2O, Other (%)	0421	0.0825	0.0050	0.1197	0.0185	0.0053	7	-1.82	16%	0
050.99	Soluble Potassium as K2O, Other (%)	0096	0.1100	0.0200	0.1197	0.0185	0.0053	7	-0.48	4%	0
050.99	Soluble Potassium as K2O, Other (%)	0482	0.1100	0.0000	0.1197	0.0185	0.0053	7	-0.48	4%	0
050.99	Soluble Potassium as K2O, Other (%)	0524	0.1255	0.0000	0.1197	0.0185	0.0053	7	0.28	2%	0
050.99	Soluble Potassium as K2O, Other (%)	0389	0.1290	0.0020	0.1197	0.0185	0.0053	7	0.45	4%	0
050.99	Soluble Potassium as K2O, Other (%)	0527	0.1350	0.0100	0.1197	0.0185	0.0053	7	0.75	6%	0
050.99	Soluble Potassium as K2O, Other (%)	0521	0.1366	0.0000	0.1197	0.0185	0.0053	7	0.82	7%	0
050.99	Soluble Potassium as K2O, Other (%)	0325	0.1500	0.1000	0.1197	0.0185	0.0053	7	1.48	13%	1
060.00	Water (Free), Vacuum Oven (%)	0007	0.3150	0.0100	0.4753	0.1531	0.0473	3	-1.05	17%	0
060.00	Water (Free), Vacuum Oven (%)	0105	0.4910	0.0520	0.4753	0.1531	0.0473	3	0.10	2%	0
060.00	Water (Free), Vacuum Oven (%)	0096	0.6200	0.0800	0.4753	0.1531	0.0473	3	0.94	15%	0
060.30	Water (Free), AFPC No. 2B (105°C oven for 2 h... (%)	0513	0.8515	0.0130				1			0
060.99	Water (Free), Other (%)	0510	0.5661	0.0537				1			0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0105	0.1423	0.0009				1			0
101.03	Acid Soluble Calcium, AA, 965.09, test portio... (%)	0105	0.1447	0.0049				1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0472	0.1200	0.0000	0.2236	0.0673	0.0073	6	-1.37	23%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0035	0.2065	0.0150	0.2236	0.0673	0.0073	6	-0.23	4%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	0.2300	0.0000	0.2236	0.0673	0.0073	6	0.08	1%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	0.2375	0.0110	0.2236	0.0673	0.0073	6	0.18	3%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	0.2400	0.0080	0.2236	0.0673	0.0073	6	0.22	4%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0402	0.3050	0.0100	0.2236	0.0673	0.0073	6	1.08	18%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	0.6375	0.0910	0.2236	0.0673	0.0073	6	5.48	93%	1
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0521	0.2545	0.0000				1			0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0117	0.2218	0.0038	0.2378	0.0127	0.0026	4	-1.26	3%	0

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101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0494	0.2337	0.0014	0.2378	0.0127	0.0026	4	-0.32	1%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0421	0.2455	0.0050	0.2378	0.0127	0.0026	4	0.61	2%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0527	0.2500	0.0000	0.2378	0.0127	0.0026	4	0.97	3%	0
101.99	Acid Soluble Calcium, Other (%)	0389	0.2350	0.0100				1			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (%)	0105	0.3890	0.0227				1			0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (%)	0105	0.3978	0.0113				1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0354	0.4320	0.0020	0.5234	0.0886	0.0250	6	-0.92	9%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0035	0.4670	0.0520	0.5234	0.0886	0.0250	6	-0.57	5%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0096	0.5050	0.0300	0.5234	0.0886	0.0250	6	-0.18	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0482	0.5250	0.0100	0.5234	0.0886	0.0250	6	0.02	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0472	0.5550	0.0100	0.5234	0.0886	0.0250	6	0.32	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (%)	0483	0.7010	0.0460	0.5234	0.0886	0.0250	6	1.78	17%	0
121.32	Acid Soluble Magnesium, ICP, test portion 200... (%)	0521	0.5310	0.0000				1			0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0117	0.5045	0.0145	0.5232	0.0186	0.0067	4	-1.01	2%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0527	0.5100	0.0000	0.5232	0.0186	0.0067	4	-0.71	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0494	0.5389	0.0072	0.5232	0.0186	0.0067	4	0.84	1%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (%)	0421	0.5395	0.0050	0.5232	0.0186	0.0067	4	0.88	2%	0
121.99	Acid Soluble Magnesium, Other (%)	0524	0.5165	0.0018				2			0
121.99	Acid Soluble Magnesium, Other (%)	0389	0.5520	0.0140				2			0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0043	4.625	0.0700	4.864	0.2532	0.0625	4	-0.94	2%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0027	4.665	0.0900	4.864	0.2532	0.0625	4	-0.78	2%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0485	5.075	0.0300	4.864	0.2532	0.0625	4	0.83	2%	0
143.00	Elemental Sulfur, Gravimetric Sulfur - carbon... (%)	0220	5.090	0.0600	4.864	0.2532	0.0625	4	0.89	2%	0
143.99	Elemental Sulfur, Other (%)	0506	4.840	0.2400	8.187	2.921	0.1600	3	-1.15	20%	0
143.99	Elemental Sulfur, Other (%)	0472	9.495	0.0100	8.187	2.921	0.1600	3	0.45	8%	0
143.99	Elemental Sulfur, Other (%)	0389	10.23	0.2300	8.187	2.921	0.1600	3	0.70	12%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0444	4.625	0.4300	5.048	0.2959	0.1400	5	-1.43	4%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0485	4.960	0.1200	5.048	0.2959	0.1400	5	-0.30	1%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0522	4.995	0.0500	5.048	0.2959	0.1400	5	-0.18	1%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0220	5.300	0.0400	5.048	0.2959	0.1400	5	0.85	2%	0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0043	5.360	0.0600	5.048	0.2959	0.1400	5	1.05	3%	0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0444	4.825	0.0300				2			0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0518	7.245	0.0900				2			0
146.99	Total Sulfur in Liquid, Other (%)	0498	9.550	0.1000				1			0
148.00	Total Sulfur, Combustion (10%)	0025	9.790	0.0200	10.13	0.3478	0.1386	7	-0.90	2%	0
148.00	Total Sulfur, Combustion (10%)	0360	9.965	0.0300	10.13	0.3478	0.1386	7	-0.44	1%	0
148.00	Total Sulfur, Combustion (10%)	0029	9.980	0.1200	10.13	0.3478	0.1386	7	-0.40	1%	0
148.00	Total Sulfur, Combustion (10%)	0043	9.990	0.0600	10.13	0.3478	0.1386	7	-0.38	1%	0
148.00	Total Sulfur, Combustion (10%)	0136	10.11	0.0400	10.13	0.3478	0.1386	7	-0.06	0%	0
148.00	Total Sulfur, Combustion (10%)	0157	10.45	0.3000	10.13	0.3478	0.1386	7	0.82	2%	0
148.00	Total Sulfur, Combustion (10%)	0451	11.00	0.4000	10.13	0.3478	0.1386	7	2.25	4%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0444	4.845*	0.0100	8.478	2.266	0.1904	12	-1.60	21%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0324	5.110*	0.0000	8.478	2.266	0.1904	12	-1.49	20%	0

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148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0230	5.450*	0.5600	8.478	2.266	0.1904	12	-1.34	18%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0055	8.705*	0.0500	8.478	2.266	0.1904	12	0.10	1%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0073	9.325	0.3700	8.478	2.266	0.1904	12	0.37	5%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0157	9.530	0.1600	8.478	2.266	0.1904	12	0.46	6%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0028	9.540	0.4000	8.478	2.266	0.1904	12	0.47	6%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0231	9.615	0.0100	8.478	2.266	0.1904	12	0.50	7%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0105	9.700	0.1000	8.478	2.266	0.1904	12	0.54	7%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0037	9.747	0.4950	8.478	2.266	0.1904	12	0.56	7%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0029	9.900	0.0400	8.478	2.266	0.1904	12	0.63	8%	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (10%)	0485	10.04	0.0900	8.478	2.266	0.1904	12	0.69	9%	0
148.04	Total Sulfur, ICP, w/Br digestion (10%)	0394	4.500*	0.0800				1			0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0444	4.670*	0.1000	9.344	1.106	0.2068	11	-4.23	25%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0422	7.805*	0.0900	9.344	1.106	0.2068	11	-1.39	8%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0483	8.930	1.300	9.344	1.106	0.2068	11	-0.37	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0527	8.955	0.2500	9.344	1.106	0.2068	11	-0.35	2%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0117	9.191	0.1820	9.344	1.106	0.2068	11	-0.14	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0292	9.335	0.0500	9.344	1.106	0.2068	11	-0.01	0%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0421	9.855	0.0500	9.344	1.106	0.2068	11	0.46	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0023	9.889	0.0590	9.344	1.106	0.2068	11	0.49	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0177	9.952	0.1131	9.344	1.106	0.2068	11	0.55	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0486	10.58	0.0500	9.344	1.106	0.2068	11	1.11	7%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0494	10.61	0.0306	9.344	1.106	0.2068	11	1.14	7%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (10%)	0515	7.873*	2.088	9.344	1.106	0.2068	11	-1.33	8%	1
148.99	Total Sulfur, Other (10%)	0354	4.178*	0.0050	9.630	0.9522	0.1588	10	-5.33	28%	0
148.99	Total Sulfur, Other (10%)	0096	4.722*	0.1430	9.630	0.9522	0.1588	10	-4.79	25%	0
148.99	Total Sulfur, Other (10%)	0518	9.345	0.0100	9.630	0.9522	0.1588	10	-0.28	1%	0
148.99	Total Sulfur, Other (10%)	0072	9.385	0.1100	9.630	0.9522	0.1588	10	-0.24	1%	0
148.99	Total Sulfur, Other (10%)	0523	9.950	0.3000	9.630	0.9522	0.1588	10	0.31	2%	0
148.99	Total Sulfur, Other (10%)	0482	10.10	0.4100	9.630	0.9522	0.1588	10	0.45	2%	0
148.99	Total Sulfur, Other (10%)	0291	10.11	0.0100	9.630	0.9522	0.1588	10	0.46	2%	0
148.99	Total Sulfur, Other (10%)	0520	10.13	0.0000	9.630	0.9522	0.1588	10	0.49	3%	0
148.99	Total Sulfur, Other (10%)	0506	10.40	0.4000	9.630	0.9522	0.1588	10	0.75	4%	0
148.99	Total Sulfur, Other (10%)	0220	10.49	0.2000	9.630	0.9522	0.1588	10	0.84	4%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0524	5.146	0.0108	7.441	2.215	0.1562	5	-1.04	15%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0519	5.180	0.0400	7.441	2.215	0.1562	5	-1.02	15%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0501	7.772	0.3220	7.441	2.215	0.1562	5	0.15	2%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0521	9.237	0.0000	7.441	2.215	0.1562	5	0.81	12%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0368	9.872	0.4081	7.441	2.215	0.1562	5	1.10	16%	0
151.00	Acid Soluble Arsenic , AA, test portion as in... (ppm)	0136	11.80	0.4000				1			0
151.30	Acid Soluble Arsenic , ICP (ppm)	0096	7.500	2.400	10.40	2.049	0.7675	4	-1.42	14%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0523	10.44	0.0200	10.40	2.049	0.7675	4	0.02	0%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0394	11.63	0.2200	10.40	2.049	0.7675	4	0.60	6%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0368	12.04	0.4300	10.40	2.049	0.7675	4	0.80	8%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0515	8.498	2.557	10.77	1.716	0.7382	6	-1.18	11%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0117	9.819	1.062	10.77	1.716	0.7382	6	-0.49	4%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0037	10.29	0.0720	10.77	1.716	0.7382	6	-0.25	2%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0527	11.37	0.0300	10.77	1.716	0.7382	6	0.31	3%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0494	12.17	0.0082	10.77	1.716	0.7382	6	0.73	7%	0
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0220	12.45	0.7000	10.77	1.716	0.7382	6	0.87	8%	0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	10.82	0.8850				1			0
151.99	Acid Soluble Arsenic , Other (ppm)	0498	8.100	0.4400				2			0
151.99	Acid Soluble Arsenic , Other (ppm)	0519	12.78	0.0500				2			0
165.30	Acid Soluble Boron , ICP, test portion in 982... (%)	0521	0.0037	0.0000	0.0141	0.0096	0.0011	3	-1.09	37%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (%)	0389	0.0162	0.0022	0.0141	0.0096	0.0011	3	0.22	7%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (%)	0354	0.0225	0.0010	0.0141	0.0096	0.0011	3	0.87	30%	0
165.99	Acid Soluble Boron , Other (%)	0421	0.0013	0.0005	0.0071	0.0041	0.0001	5	-1.23	41%	0
165.99	Acid Soluble Boron , Other (%)	0524	0.0041	0.0000	0.0071	0.0041	0.0001	5	-0.63	21%	0
165.99	Acid Soluble Boron , Other (%)	0472	0.0100	0.0000	0.0071	0.0041	0.0001	5	0.62	21%	0
165.99	Acid Soluble Boron , Other (%)	0482	0.0100	0.0000	0.0071	0.0041	0.0001	5	0.62	21%	0
165.99	Acid Soluble Boron , Other (%)	0527	0.0100	0.0000	0.0071	0.0041	0.0001	5	0.62	21%	0
165.99	Acid Soluble Boron , Other (%)	0483	0.0173	0.0096	0.0071	0.0041	0.0001	5	2.16	72%	1
181.00	Acid Soluble Cadmium , AA, test portion as in... (ppm)	0300	2.795	0.0100				2			0
181.00	Acid Soluble Cadmium , AA, test portion as in... (ppm)	0136	2.850	0.3000				2			0
181.30	Acid Soluble Cadmium , ICP (ppm)	0368	1.870	0.0400	2.452	0.3278	0.0156	8	-1.62	12%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0035	2.270	0.0000	2.452	0.3278	0.0156	8	-0.51	4%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0444	2.335	0.0300	2.452	0.3278	0.0156	8	-0.33	2%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0523	2.420	0.0000	2.452	0.3278	0.0156	8	-0.09	1%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0394	2.480	0.0200	2.452	0.3278	0.0156	8	0.08	1%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0524	2.496	0.0144	2.452	0.3278	0.0156	8	0.12	1%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	2.710	0.0200	2.452	0.3278	0.0156	8	0.72	5%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0482	3.500	0.0000	2.452	0.3278	0.0156	8	2.92	21%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0096	2.050	0.1000	2.452	0.3278	0.0156	8	-1.12	8%	1
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0515	1.981	0.0756	2.519	0.3562	0.1332	5	-1.51	11%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0527	2.425	0.0700	2.519	0.3562	0.1332	5	-0.26	2%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0494	2.582	0.0192	2.519	0.3562	0.1332	5	0.18	1%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0037	2.657	0.0010	2.519	0.3562	0.1332	5	0.39	3%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0220	2.950	0.5000	2.519	0.3562	0.1332	5	1.21	9%	0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0230	2.190	0.2200				1			0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				1			4
181.99	Acid Soluble Cadmium , Other (ppm)	0519	2.350	0.0400				1			0
191.30	Acid Soluble Chromium , ICP (ppm)	0027	40.50	1.000	69.94	7.771	2.165	8	-3.47	21%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	66.40	4.600	69.94	7.771	2.165	8	-0.42	3%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0394	66.85	0.3000	69.94	7.771	2.165	8	-0.36	2%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	69.40	6.400	69.94	7.771	2.165	8	-0.06	0%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0368	69.58	1.260	69.94	7.771	2.165	8	-0.04	0%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0444	71.17	1.460	69.94	7.771	2.165	8	0.14	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				
191.30	Acid Soluble Chromium , ICP (ppm)	0389	77.00	1.000	69.94	7.771	2.165	8	0.83	5%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	80.85	1.300	69.94	7.771	2.165	8	1.28	8%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0527	58.72	4.690	67.28	5.281	1.793	5	-1.42	6%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0117	65.97	1.240	67.28	5.281	1.793	5	-0.22	1%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0220	69.50	1.000	67.28	5.281	1.793	5	0.37	2%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0515	70.03	1.755	67.28	5.281	1.793	5	0.45	2%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0494	72.18	0.2802	67.28	5.281	1.793	5	0.81	4%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0037	56.46	29.93	67.28	5.281	1.793	5	-1.79	8%	1
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	0230	66.00	1.200				2			0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	0515	71.90	1.640				2			0
191.99	Acid Soluble Chromium , Other (ppm)	0506	49.25	1.500				2			0
191.99	Acid Soluble Chromium , Other (ppm)	0519	77.95	0.0900				2			0
202.30	Acid Soluble Cobalt , ICP (ppm)	0096	1.590	0.0200	2.489	0.9664	0.0961	6	-0.83	18%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0523	1.940	0.1400	2.489	0.9664	0.0961	6	-0.51	11%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	2.100	0.0000	2.489	0.9664	0.0961	6	-0.36	8%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0035	2.370	0.1800	2.489	0.9664	0.0961	6	-0.11	2%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0482	3.000	0.2000	2.489	0.9664	0.0961	6	0.47	10%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0524	3.937	0.0363	2.489	0.9664	0.0961	6	1.33	29%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0368	1.295	2.590	2.489	0.9664	0.0961	6			4
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0515	0.4762	0.2111	2.048	0.9294	0.1915	5	-1.69	38%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0527	1.960	0.0400	2.048	0.9294	0.1915	5	-0.09	2%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0220	2.400	0.6000	2.048	0.9294	0.1915	5	0.38	9%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0494	2.688	0.0036	2.048	0.9294	0.1915	5	0.69	16%	0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0037	2.714	0.1030	2.048	0.9294	0.1915	5	0.72	16%	0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
202.99	Acid Soluble Cobalt , Other (ppm)	0519	2.810	0.0200				1			0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0483	0.0016	0.0002	0.2985	0.5122	0.1001	3	-0.58	50%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0402	0.0040	0.0000	0.2985	0.5122	0.1001	3	-0.58	49%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0368	0.8900	0.3000	0.2985	0.5122	0.1001	3	1.15	99%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0354	0.0000	0.0000	0.2985	0.5122	0.1001	3			4
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0472	0.0000	0.0000	0.2985	0.5122	0.1001	3			4
221.32	Acid Soluble Copper , ICP, test portion 2006.... (%)	0394	0.0002	0.0001				1			0
221.32	Acid Soluble Copper , ICP, test portion 2006.... (%)	0521	0.0000	0.0000				1			4
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0515	0.0004	0.0000				1			0
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0527	0.0000	0.0000				1			4
221.99	Acid Soluble Copper , Other (%)	0515	0.0004	0.0002				2			0
221.99	Acid Soluble Copper , Other (%)	0519	5.105	0.0300				2			0
221.99	Acid Soluble Copper , Other (%)	0389	0.0001	0.0002				2			4
241.00	Acid Soluble Iron, AA, inorganic 965.09 (%)	0105	0.8372	0.0431				1			0
241.03	Acid Soluble Iron, AA, 965.09, test portion 2... (%)	0105	0.7695	0.0336				1			0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0131	0.0052	0.0013	0.8075	0.1471	0.0304	8	-4.99	50%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0354	0.6765	0.0030	0.8075	0.1471	0.0304	8	-0.81	8%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0096	0.7900	0.0560	0.8075	0.1471	0.0304	8	-0.11	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				
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0402	0.8050	0.0300	0.8075	0.1471	0.0304	8	-0.02	0%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0035	0.8230	0.0300	0.8075	0.1471	0.0304	8	0.10	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0472	0.8650	0.0100	0.8075	0.1471	0.0304	8	0.36	4%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0482	0.9150	0.0300	0.8075	0.1471	0.0304	8	0.67	7%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (%)	0483	0.9985	0.0830	0.8075	0.1471	0.0304	8	1.19	12%	0
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0521	0.8473	0.0000				1			0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0117	0.7906	0.0195	0.8432	0.0432	0.0120	4	-1.22	3%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0494	0.8349	0.0133	0.8432	0.0432	0.0120	4	-0.19	0%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0421	0.8525	0.0050	0.8432	0.0432	0.0120	4	0.21	1%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (%)	0527	0.8950	0.0100	0.8432	0.0432	0.0120	4	1.20	3%	0
241.99	Acid Soluble Iron, Other (%)	0389	0.8805	0.0170				2			0
241.99	Acid Soluble Iron, Other (%)	0524	0.9061	0.0111				2			0
251.30	Acid Soluble Lead , ICP (ppm)	0389	0.9500	0.1000	2.191	1.309	0.1468	4	-0.95	28%	0
251.30	Acid Soluble Lead , ICP (ppm)	0524	1.240	0.0171	2.191	1.309	0.1468	4	-0.73	22%	0
251.30	Acid Soluble Lead , ICP (ppm)	0035	2.905	0.3300	2.191	1.309	0.1468	4	0.55	16%	0
251.30	Acid Soluble Lead , ICP (ppm)	0394	3.670	0.1400	2.191	1.309	0.1468	4	1.13	34%	0
251.30	Acid Soluble Lead , ICP (ppm)	0368	0.0000	0.0000	2.191	1.309	0.1468	4			4
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0220	0.9500	0.3000	1.941	1.604	0.8202	4	-0.62	26%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0494	1.052	0.0978	1.941	1.604	0.8202	4	-0.55	23%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0527	1.435	0.0100	1.941	1.604	0.8202	4	-0.32	13%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0515	4.327	2.873	1.941	1.604	0.8202	4	1.49	61%	0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
251.99	Acid Soluble Lead , Other (ppm)	0519	1.375	0.0500				1			0
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (%)	0105	0.0291	0.0002				1			0
261.15	Acid Soluble Manganese , AA, 965.09, test por... (%)	0105	0.0290	0.0004				1			0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0354	0.0250	0.0000	0.0287	0.0025	0.0007	4	-1.47	6%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0096	0.0294	0.0019	0.0287	0.0025	0.0007	4	0.25	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0472	0.0300	0.0000	0.0287	0.0025	0.0007	4	0.51	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (%)	0035	0.0305	0.0010	0.0287	0.0025	0.0007	4	0.71	3%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (%)	0482	0.0300	0.0000				1			0
261.32	Acid Soluble Manganese , ICP, test portion in... (%)	0402	0.0300	0.0000				2			0
261.32	Acid Soluble Manganese , ICP, test portion in... (%)	0483	0.0379	0.0002				2			0
261.34	Acid Soluble Manganese , ICP, test portion 20... (%)	0521	0.0309	0.0000				1			0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0117	0.0276	0.0007	0.0300	0.0020	0.0016	4	-1.22	4%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0527	0.0300	0.0000	0.0300	0.0020	0.0016	4	-0.01	0%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0494	0.0301	0.0005	0.0300	0.0020	0.0016	4	0.01	0%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (%)	0421	0.0325	0.0050	0.0300	0.0020	0.0016	4	1.22	4%	0
261.99	Acid Soluble Manganese , Other (%)	0389	0.0302	0.0005				2			0
261.99	Acid Soluble Manganese , Other (%)	0524	0.0313	0.0003				2			0
281.30	Acid Soluble Mercury , ICP (ppm)	0527	0.0310	0.0000	14.04	24.14	0.0629	3	-0.58	50%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.1738	0.0626	14.04	24.14	0.0629	3	-0.57	49%	0
281.30	Acid Soluble Mercury , ICP (ppm)	0394	41.91	0.1260	14.04	24.14	0.0629	3	1.15	99%	0
281.99	Acid Soluble Mercury , Other (ppm)	0519	0.0200	0.0000				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				
289.30	Acid Soluble Molybdenum , ICP (ppm)	0096	8.450	0.1000	10.92	1.767	0.6593	7	-1.26	11%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0368	9.630	2.040	10.92	1.767	0.6593	7	-0.66	6%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0433	10.49	0.3500	10.92	1.767	0.6593	7	-0.22	2%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0389	11.10	0.2000	10.92	1.767	0.6593	7	0.09	1%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0035	11.45	1.900	10.92	1.767	0.6593	7	0.27	2%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0524	12.25	0.0249	10.92	1.767	0.6593	7	0.68	6%	0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0521	13.05	0.0000	10.92	1.767	0.6593	7	1.09	10%	0
289.32	Acid Soluble Molybdenum , ICP, 2006.03 (ppm)	0394	10.90	0.2000				1			0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0117	11.29	0.0700	12.39	0.8321	0.2023	5	-1.16	4%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0037	11.88	0.0470	12.39	0.8321	0.2023	5	-0.54	2%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0494	12.42	0.0544	12.39	0.8321	0.2023	5	0.03	0%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0220	13.15	0.7000	12.39	0.8321	0.2023	5	0.80	3%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0527	13.23	0.1400	12.39	0.8321	0.2023	5	0.88	3%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (ppm)	0515	7.419	4.509	12.39	0.8321	0.2023	5	-5.22	20%	1
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (ppm)	0515	8.532	1.747				2			0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (ppm)	0230	11.30	0.2000				2			0
289.99	Acid Soluble Molybdenum , Other (ppm)	0519	7.610	0.0600				2			0
289.99	Acid Soluble Molybdenum , Other (ppm)	0506	10.00	0.0000				2			0
291.00	Acid Soluble Nickel , AA, test portion as in ... (ppm)	0136	10.50	1.000				1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0096	8.050	0.3000	10.59	0.6764	0.3381	10	-3.49	12%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	10.20	0.2000	10.59	0.6764	0.3381	10	-0.53	2%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0394	10.20	0.2000	10.59	0.6764	0.3381	10	-0.53	2%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0523	10.37	0.5200	10.59	0.6764	0.3381	10	-0.30	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0521	10.39	0.0000	10.59	0.6764	0.3381	10	-0.28	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0524	10.52	0.1210	10.59	0.6764	0.3381	10	-0.09	0%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	10.61	0.8500	10.59	0.6764	0.3381	10	0.02	0%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0482	11.15	0.5000	10.59	0.6764	0.3381	10	0.77	3%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0389	11.30	0.4000	10.59	0.6764	0.3381	10	0.98	3%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0368	11.57	0.2900	10.59	0.6764	0.3381	10	1.34	5%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0527	10.71	0.1300	11.17	0.4217	0.2266	5	-0.96	2%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0117	10.74	0.3200	11.17	0.4217	0.2266	5	-0.89	2%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0220	11.35	0.5000	11.17	0.4217	0.2266	5	0.38	1%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0037	11.41	0.0970	11.17	0.4217	0.2266	5	0.49	1%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0494	11.64	0.0859	11.17	0.4217	0.2266	5	0.98	2%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w... (ppm)	0515	8.166	3.095	11.17	0.4217	0.2266	5	-6.21	13%	1
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	7.775	1.001				2			0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0230	10.50	0.2000				2			0
291.99	Acid Soluble Nickel , Other (ppm)	0519	12.30	0.0300				1			0
301.30	Acid Soluble Selenium , ICP (ppm)	0524	0.2825	0.0107				2			0
301.30	Acid Soluble Selenium , ICP (ppm)	0523	0.8800	0.0200				2			0
301.30	Acid Soluble Selenium , ICP (ppm)	0368	0.0000	0.0000				2			4
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0515	0.1293	0.0953				2			0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified... (ppm)	0527	4.020	0.7600				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				
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	0515	0.0000	0.0000				0			4
301.99	Acid Soluble Selenium , Other (ppm)	0519	0.0100	0.0000				1			0
311.32	Sodium, ICP, 2006.03 test portion (%)	0521	0.1159	0.0000				1			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0494	0.1154	0.0031	0.1203	0.0084	0.0087	3	-0.59	2%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0035	0.1155	0.0230	0.1203	0.0084	0.0087	3	-0.57	2%	0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0527	0.1300	0.0000	0.1203	0.0084	0.0087	3	1.15	4%	0
311.99	Sodium, Other (%)	0482	0.1200	0.0000	0.1353	0.0186	0.0033	3	-0.83	6%	0
311.99	Sodium, Other (%)	0096	0.1300	0.0000	0.1353	0.0186	0.0033	3	-0.29	2%	0
311.99	Sodium, Other (%)	0354	0.1560	0.0100	0.1353	0.0186	0.0033	3	1.11	8%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0428	0.0103	0.0019				2			0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (%)	0105	0.0104	0.0001				2			0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0072	0.0100	0.0000	0.0129	0.0036	0.7705	10	-0.75	11%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0472	0.0100	0.0000	0.0129	0.0036	0.7705	10	-0.75	11%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0482	0.0100	0.0000	0.0129	0.0036	0.7705	10	-0.75	11%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0230	0.0109	0.0001	0.0129	0.0036	0.7705	10	-0.53	8%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0354	0.0120	0.0000	0.0129	0.0036	0.7705	10	-0.23	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0035	0.0125	0.0010	0.0129	0.0036	0.7705	10	-0.10	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0433	0.0126	0.0006	0.0129	0.0036	0.7705	10	-0.08	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0483	0.0144	0.0006	0.0129	0.0036	0.7705	10	0.38	6%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0444	0.1035	0.0030	0.0129	0.0036	0.7705	10	23.26	351%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0368	132.0	7.700	0.0129	0.0036	0.7705	10	33879.77	511314%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (%)	0096	139.4	14.80	0.0129	0.0036	0.7705	10	35792.83	540186%	1
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0394	0.0110	0.0000				2			0
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0521	0.0124	0.0000				2			0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0527	0.0100	0.0000	0.0113	0.0016	0.0019	6	-0.69	6%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0117	0.0102	0.0004	0.0113	0.0016	0.0019	6	-0.58	5%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0494	0.0105	0.0001	0.0113	0.0016	0.0019	6	-0.44	4%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0515	0.0109	0.0007	0.0113	0.0016	0.0019	6	-0.22	2%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0421	0.0125	0.0050	0.0113	0.0016	0.0019	6	0.69	6%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0220	0.0135	0.0050	0.0113	0.0016	0.0019	6	1.24	10%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (%)	0037	62.68	102.8	0.0113	0.0016	0.0019	6	34652.19	278534%	2
321.99	Acid Soluble Zinc , Other (%)	0027	0.0040	0.0000	0.0109	0.0025	0.0000	7	-2.49	32%	0
321.99	Acid Soluble Zinc , Other (%)	0487	0.0100	0.0000	0.0109	0.0025	0.0000	7	-0.33	4%	0
321.99	Acid Soluble Zinc , Other (%)	0506	0.0100	0.0000	0.0109	0.0025	0.0000	7	-0.33	4%	0
321.99	Acid Soluble Zinc , Other (%)	0389	0.0111	0.0001	0.0109	0.0025	0.0000	7	0.05	1%	0
321.99	Acid Soluble Zinc , Other (%)	0524	0.0116	0.0001	0.0109	0.0025	0.0000	7	0.23	3%	0
321.99	Acid Soluble Zinc , Other (%)	0523	0.0120	0.0000	0.0109	0.0025	0.0000	7	0.39	5%	0
321.99	Acid Soluble Zinc , Other (%)	0519	0.0600	0.0000	0.0109	0.0025	0.0000	7	17.67	225%	0
321.99	Acid Soluble Zinc , Other (%)	0515	0.0107	0.0008	0.0109	0.0025	0.0000	7	-0.08	1%	1

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

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				

solely for the purpose of this Proficiency Testing program.