

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

# Methods: 126

Sample # 160811

### Statistical Summary

# Labs Reporting: 80

Liquid Organic

Issue Date : 09/30/2016

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 (%)	10	9	4.409	0.1434	4.417		0.1243	0.0518	2.81%		0.0404	3.20%
001.99	Ammoniacal Nitrogen, Other (%)	14	13	4.426	0.1530	4.426		0.1735	0.0602	3.92%		0.0314	3.20%
003.99	Water Insoluble Nitrogen, Other (%)	1		4.880									
005.00	Urea Nitrogen, Urease (as N) (%)	2	2	0.4810	0.2319								
005.99	Urea Nitrogen, Other (%)	6	6	0.7267	0.1354	0.7267		0.1536	0.0784	21.13%		0.0267	4.20%
007.00	Urea, Urease (as Urea) (%)	1		0.6900									
007.99	Urea, Other (%)	2	2	1.575	0.2828								
010.11	Total Nitrogen, Modified Comprehensive (5%)	8	8	5.207	0.2423	5.200	0.5118	0.2582	0.1141	4.97%	4.92%	0.0475	3.12%
010.12	Total Nitrogen, Salicylic (5%)	1		5.035									
010.17	Total Nitrogen, Comprehensive (5%)	1		5.070									
010.60	Total Nitrogen, Combustion (5%)	52	50	5.203	0.1779	5.195	0.5118	0.1665	0.0294	3.20%	4.93%	0.0720	3.12%
010.99	Total Nitrogen, Other (5%)	11	11	5.175	0.1831	5.165	0.5118	0.1827	0.0689	3.54%	4.96%	0.0655	3.12%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ... (%)	8	8	19.58	0.2541	19.58		0.2882	0.1274	1.47%		0.1850	2.56%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb... (%)	16	16	19.52	0.3667	19.51		0.3799	0.1187	1.95%		0.2393	2.56%
020.40	Total Phosphorus as P2O5, Automated (%)	6	5	17.73	3.718	17.73		3.718	2.078	20.97%		0.1360	2.59%
020.50	Total Phosphorus as P2O5, ICP (%)	19	18	20.40	2.194	19.92		1.188	0.3501	5.97%		0.2728	2.55%
020.99	Total Phosphorus as P2O5, Other (%)	3	3	19.65	0.4435	19.65		0.4435	0.3201	2.26%		0.0433	2.56%
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q... (20%)	3	3	19.68	0.2338	19.68	0.7169	0.2338	0.1688	1.19%	1.82%	0.2154	2.55%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q... (20%)	3	3	19.31	0.2524	19.31	0.7169	0.2524	0.1821	1.31%	1.86%	0.0400	2.56%
041.20	Direct Available Phosphorus as P2O5, Spectrophotom... (20%)	2	2	19.43	0.1050								
041.21	Direct Available Phosphorus as P2O5, Spectrophotom... (20%)	1		19.52									
041.40	Direct Available Phosphorus as P2O5, Automated (20%)	2	2	19.68	0.2227								
041.50	Direct Available Phosphorus as P2O5, ICP (20%)	3	3	19.53	0.9293	19.53	0.7169	0.9293	0.6707	4.76%	1.84%	0.7890	2.56%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-... (20%)	7	6	19.32	0.4000	19.32	0.7169	0.4536	0.2315	2.35%	1.86%	0.2155	2.56%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ... (20%)	11	10	18.54	2.473	19.31	0.7169	0.5319	0.2103	2.76%	1.86%	0.0973	2.56%
041.99	Direct Available Phosphorus as P2O5, Other (20%)	1		19.51									
048.20	Water Soluble Phosphorus as P2O5, Spectrophotometr... (%)	2	2	14.85	4.752								
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	1		19.58									
048.99	Water Soluble Phosphorus as P2O5, Other (%)	2	2	18.02	2.178								
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	10	9	3.955	0.1868	3.955	0.4100	0.2118	0.0883	5.36%	5.18%	0.0344	3.25%
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	7	7	4.011	0.4689	3.977	0.4100	0.4520	0.2135	11.36%	5.15%	0.1717	3.25%

Method Code	Analyte & Method	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Analyte Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	IA %RSD	Average Range (R-bar)	Horwitz %RSD
050.31	Soluble Potassium as K2O, AA (Citrate) (4%)	1		4.010									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	8	8	4.023	0.4953	3.912	0.4100	0.2532	0.1119	6.47%	5.24%	0.0686	3.26%
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	6	5	3.915	0.1544	3.915	0.4100	0.1544	0.0863	3.94%	5.24%	0.1140	3.26%
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	8	8	4.023	0.1652	4.018	0.4100	0.1758	0.0777	4.38%	5.10%	0.0536	3.24%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala... (4%)	4	4	3.902	0.4344	3.902	0.4100	0.4344	0.2715	11.13%	5.25%	0.0700	3.26%
050.61	Soluble Potassium as K2O, Flame Photometric (Citra... (4%)	3	3	3.915	0.3531	3.915	0.4100	0.3531	0.2548	9.02%	5.24%	0.1300	3.26%
050.62	Soluble Potassium as K2O, Flame Photometric (Citra... (4%)	5	5	3.788	0.0788	3.788	0.4100	0.0788	0.0440	2.08%	5.41%	0.0726	3.27%
050.99	Soluble Potassium as K2O, Other (4%)	26	26	4.111	0.4908	4.006	0.4100	0.2175	0.0533	5.43%	5.12%	0.0762	3.25%
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	1		0.0148									
101.03	Acid Soluble Calcium, AA, 965.09, test portion 200... (%)	1		0.0166									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (%)	8	7	0.0327	0.0378	0.0209		0.0096	0.0045	45.87%		0.0079	7.16%
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C (%)	1		0.0185									
101.33	Acid Soluble Calcium, ICP, test portion 2006.03A-C... (%)	3	3	0.0200	0.0088	0.0200		0.0088	0.0063	43.87%		0.0011	7.21%
101.99	Acid Soluble Calcium, Other (%)	1		0.0175									
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (0.05%)	6	6	0.1387	0.0353	0.1276	0.2061	0.0104	0.0053	8.13%	80.78%	0.0018	5.45%
121.03	Acid Soluble Magnesium, AA, 965.09, test portion 2... (0.05%)	1		0.1118									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (0.05%)	26	24	0.1232	0.0258	0.1223	0.2061	0.0089	0.0023	7.24%	84.23%	0.0046	5.49%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A... (0.05%)	1		0.1442									
121.33	Acid Soluble Magnesium, ICP, test portion 2006.03A... (0.05%)	5	5	0.3861	0.5142	0.3861	0.2061	0.5142	0.2874	133.18%	26.69%	0.0147	4.62%
121.99	Acid Soluble Magnesium, Other (0.05%)	8	7	0.1026	0.0243	0.1026	0.2061	0.0275	0.0130	26.84%	100.45%	0.0007	5.63%
131.30	Water Soluble Magnesium, ICP (%)	2	2	0.1150	0.0071								
143.99	Elemental Sulfur, Other (%)	2	2	0.5760	0.0085								
148.01	Total Sulfur, Gravimetric - sulfate and elemental (%)	2	2	0.6180	0.1159								
148.07	Total Sulfur, ICP, test portion as in 2006.03 modi... (%)	6	6	0.5685	0.0710	0.5685		0.0805	0.0411	14.16%		0.0247	4.35%
148.99	Total Sulfur, Other (%)	4	4	0.4961	0.0472	0.4961		0.0472	0.0295	9.51%		0.0227	4.44%
149.04	Sulfur - HNO3 soluble, ICP (%)	2	2	0.6478	0.1445								
151.00	Acid Soluble Arsenic , AA, test portion as in 2006... (ppm)	1		0.2500									
151.30	Acid Soluble Arsenic , ICP (ppm)	4	3	0.5548	0.1340	0.5548		0.1340	0.0967	24.16%		0.1557	17.48%
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified w/9:3... (ppm)	1		0.3994									
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	1		0.8178									
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	5	5	0.0386	0.0358	0.0386	0.0066	0.0358	0.0200	92.75%	8.59%	0.0018	6.53%
165.30	Acid Soluble Boron , ICP, test portion in 982.01 ... (0.02%)	9	8	0.0243	0.0029	0.0238	0.0066	0.0022	0.0010	9.31%	13.89%	0.0016	7.02%
165.99	Acid Soluble Boron , Other (0.02%)	16	15	0.0249	0.0056	0.0243	0.0066	0.0047	0.0015	19.26%	13.65%	0.0005	7.00%
171.99	Water Soluble Boron , Other (%)	3	3	0.0217	0.0006	0.0217		0.0006	0.0004	2.66%		0.0027	7.12%
181.00	Acid Soluble Cadmium , AA, test portion as in 2006... (ppm)	1		4.700									
181.30	Acid Soluble Cadmium , ICP (ppm)	13	13	4.707	0.6061	4.707		0.6873	0.2383	14.60%		0.1179	12.67%
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified w/9:3... (ppm)	3	3	5.072	0.2304	5.072		0.2304	0.1663	4.54%		0.4168	12.53%
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	2	2	4.736	0.2107								
181.99	Acid Soluble Cadmium , Other (ppm)	3	3	6.278	2.174	6.278		2.174	1.569	34.63%		0.3167	12.13%
190.00	Water Soluble Chlorine, Titrimetric (%)	1		1.320									
191.30	Acid Soluble Chromium , ICP (ppm)	13	12	93.16	9.205	93.23		10.27	3.705	11.01%		0.9409	8.08%
191.33	Acid Soluble Chromium , ICP, 2006.03 modified w/9:... (ppm)	4	4	109.4	32.31	109.4		32.31	20.19	29.54%		5.651	7.89%

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191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	2	2	115.4	32.75								
191.99	Acid Soluble Chromium , Other (ppm)	3	3	102.6	9.146	102.6		9.146	6.601	8.92%		3.033	7.97%
202.30	Acid Soluble Cobalt , ICP (ppm)	7	5	0.2850	0.2035	0.2850		0.2035	0.1138	71.41%		0.0380	19.32%
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w/9:3 ... (ppm)	2	2	0.3285	0.1155								
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	1		0.0402									
221.30	Acid Soluble Copper , ICP, test portion inorganic ... (%)	7	4	0.0009	0.0008	0.0009		0.0008	0.0005	84.10%		0.0008	11.47%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-C (%)	1		0.0000									
221.33	Acid Soluble Copper , ICP, test portion 2006.03A-C... (%)	1		0.0006									
221.99	Acid Soluble Copper , Other (%)	4	3	0.0005	0.0005	0.0005		0.0005	0.0003	84.55%		0.0001	12.43%
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.05%)	3	3	0.1410	0.0357	0.1410	0.0207	0.0357	0.0257	25.30%	7.33%	0.0038	5.37%
241.03	Acid Soluble Iron, AA, 965.09, test portion 2006.0... (0.05%)	1		0.1647									
241.30	Acid Soluble Iron, ICP, test portion inorganic 965... (0.05%)	22	22	0.1625	0.0322	0.1622	0.0207	0.0085	0.0023	5.21%	6.37%	0.0072	5.26%
241.32	Acid Soluble Iron, ICP, test portion 2006.03A-C ... (0.05%)	1		0.2070									
241.33	Acid Soluble Iron, ICP, test portion 2006.03A-C, w... (0.05%)	5	5	0.1623	0.0230	0.1623	0.0207	0.0230	0.0129	14.18%	6.37%	0.0074	5.26%
241.99	Acid Soluble Iron, Other (0.05%)	9	9	0.1252	0.0403	0.1278	0.0207	0.0396	0.0165	30.96%	8.09%	0.0042	5.45%
251.00	Acid Soluble Lead , AA, test portion as in 2006.03... (ppm)	1		1.000									
251.30	Acid Soluble Lead , ICP (ppm)	5	5	0.4741	0.1559	0.4741		0.1559	0.0872	32.89%		0.0238	17.90%
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9:3 HN... (ppm)	2	2	0.9098	0.0173								
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	1		1.121									
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (0.2%)	4	4	0.2741	0.0084	0.2741	0.0314	0.0084	0.0053	3.07%	5.73%	0.0074	4.86%
261.15	Acid Soluble Manganese , AA, 965.09, test portion ... (0.2%)	1		0.2649									
261.30	Acid Soluble Manganese , ICP, test portion 972.02a... (0.2%)	12	12	0.2780	0.0512	0.2654	0.0314	0.0140	0.0050	5.27%	5.92%	0.0055	4.88%
261.31	Acid Soluble Manganese , ICP, test portion 972.02b... (0.2%)	5	5	0.2711	0.0194	0.2711	0.0314	0.0194	0.0108	7.15%	5.79%	0.0054	4.87%
261.32	Acid Soluble Manganese , ICP, test portion inorgan... (0.2%)	3	3	0.2628	0.0160	0.2628	0.0314	0.0160	0.0115	6.09%	5.98%	0.0109	4.89%
261.34	Acid Soluble Manganese , ICP, test portion 2006.03... (0.2%)	1		0.3655									
261.35	Acid Soluble Manganese , ICP, test portion 2006.03... (0.2%)	6	6	0.2747	0.0243	0.2717	0.0314	0.0201	0.0103	7.41%	5.78%	0.0137	4.87%
261.99	Acid Soluble Manganese , Other (0.2%)	10	10	0.2414	0.0256	0.2428	0.0314	0.0256	0.0101	10.53%	6.47%	0.0101	4.95%
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	1		0.2450									
281.00	Acid Soluble Mercury , AA (ppm)	1		0.0000									
281.30	Acid Soluble Mercury , ICP (ppm)	2	1	0.0200									
289.00	Acid Soluble Molybdenum , AA, test portion in 2006... (30ppm)	1		33.30									
289.30	Acid Soluble Molybdenum , ICP (30ppm)	16	15	34.86	14.89	34.76	11.4650	4.114	1.328	11.84%	16.49%	0.5130	9.38%
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modified w/... (30ppm)	5	5	35.84	1.572	35.84	11.4650	1.572	0.8790	4.39%	16.00%	0.6445	9.33%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (30ppm)	2	2	33.75	2.963								
289.99	Acid Soluble Molybdenum , Other (30ppm)	4	4	36.94	10.12	36.94	11.4650	10.12	6.322	27.38%	15.52%	0.5250	9.29%
291.00	Acid Soluble Nickel , AA, test portion as in 2006.... (ppm)	1		1.000									
291.30	Acid Soluble Nickel , ICP (ppm)	9	9	1.160	0.1400	1.160		0.1588	0.0662	13.68%		0.0661	15.64%
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w/9:3 ... (ppm)	2	2	1.039	0.1781								
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	1		0.6534									
291.99	Acid Soluble Nickel , Other (ppm)	1		3.750									
301.30	Acid Soluble Selenium , ICP (ppm)	3	2	0.8100	1.131	0.8100		1.131	1.000	139.68%		0.0200	16.51%
301.33	Acid Soluble Selenium , ICP, 2006.03 modified w/9:... (ppm)	2	2	1.004	0.0855								

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301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	1		0.8536									
311.32	Sodium, ICP, 2006.03 test portion (%)	1		1.196									
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl test ... (%)	2	2	0.7791	0.0327								
311.99	Sodium, Other (%)	4	4	0.8741	0.0733	0.8741		0.0733	0.0458	8.38%		0.0214	4.08%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.03%)	6	5	0.0594	0.0064	0.0594	0.0114	0.0064	0.0036	10.70%	9.61%	0.0001	6.12%
321.03	Acid Soluble Zinc , AA, 965.09, test portion 2006.... (0.03%)	1		0.0636									
321.30	Acid Soluble Zinc , ICP, test portion inorganic 96... (0.03%)	23	22	0.0664	0.0060	0.0657	0.0114	0.0046	0.0012	6.98%	8.69%	0.0021	6.03%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C ... (0.03%)	1		0.0935									
321.33	Acid Soluble Zinc , ICP, test portion 2006.03A-C, ... (0.03%)	6	5	0.0655	0.0085	0.0655	0.0114	0.0085	0.0048	13.05%	8.72%	0.0009	6.03%
321.99	Acid Soluble Zinc , Other (0.03%)	8	7	0.0531	0.0137	0.0531	0.0114	0.0155	0.0073	29.19%	10.75%	0.0006	6.22%
325.30	Water Soluble Zinc , ICP (%)	1		0.0670									

# magruder fertilizer

## check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 160811

Method Precision Report

Liquid Organic

Issue Date : 09/30/2016

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility SR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	10	9	4.409	0.1434	0.1414	0.0338	0.1454	3.21%	0.77%	3.30%	4.296
001.99	Ammoniacal Nitrogen, Other (%)	14	12	4.423	0.1592	0.1583	0.0245	0.1602	3.58%	0.55%	3.62%	6.534
010.60	Total Nitrogen, Combustion (5%)	52	46	5.198	0.1524	0.1479	0.0517	0.1567	2.85%	0.99%	3.01%	3.033
010.99	Total Nitrogen, Other (5%)	11	10	5.161	0.1858	0.1834	0.0422	0.1882	3.55%	0.82%	3.65%	4.455
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium MolybdoP (%)	8	8	19.58	0.2541	0.2288	0.1564	0.2771	1.17%	0.80%	1.42%	1.772
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	16	15	19.52	0.3789	0.3490	0.2086	0.4066	1.79%	1.07%	2.08%	1.949
020.50	Total Phosphorus as P2O5, ICP (%)	19	16	20.03	1.542	1.536	0.1967	1.548	7.67%	0.98%	7.73%	7.871
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (20%)	11	8	19.28	0.7258	0.7249	0.0499	0.7267	3.76%	0.26%	3.77%	14.57
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	10	9	3.955	0.1868	0.1857	0.0288	0.1879	4.69%	0.73%	4.75%	6.530
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	8	8	4.023	0.1652	0.1622	0.0448	0.1683	4.03%	1.11%	4.18%	3.756
050.99	Soluble Potassium as K2O, Other (4%)	26	23	3.983	0.2525	0.2477	0.0692	0.2572	6.22%	1.74%	6.46%	3.717
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (0.05%)	26	23	0.1199	0.0204	0.0201	0.0046	0.0206	16.78%	3.85%	17.22%	4.472
165.99	Acid Soluble Boron , Other (0.02%)	16	13	0.0234	0.0037	0.0037	0.0003	0.0037	15.64%	1.13%	15.68%	13.83
181.30	Acid Soluble Cadmium , ICP (ppm)	13	13	4.707	0.6061	0.6000	0.1207	0.6121	12.75%	2.56%	13.00%	5.072
191.30	Acid Soluble Chromium , ICP (ppm)	13	11	92.21	9.029	9.016	0.6764	9.042	9.78%	0.73%	9.81%	13.37
241.30	Acid Soluble Iron, ICP, test portion inorganic 965.09 (0.05%)	22	19	0.1612	0.0071	0.0055	0.0063	0.0083	3.41%	3.88%	5.17%	1.332
241.99	Acid Soluble Iron, Other (0.05%)	9	8	0.1215	0.0415	0.0414	0.0029	0.0415	34.08%	2.39%	34.17%	14.33
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (0.2%)	12	11	0.2635	0.0109	0.0103	0.0051	0.0115	3.91%	1.95%	4.37%	2.245
261.99	Acid Soluble Manganese , Other (0.2%)	10	9	0.2410	0.0271	0.0264	0.0083	0.0277	10.97%	3.44%	11.49%	3.338
289.30	Acid Soluble Molybdenum , ICP (30ppm)	16	12	34.68	4.039	4.032	0.3463	4.046	11.62%	1.00%	11.67%	11.68
291.30	Acid Soluble Nickel , ICP (ppm)	9	9	1.160	0.1400	0.1305	0.0719	0.1489	11.24%	6.19%	12.84%	2.072
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (0.03%)	23	19	0.0656	0.0049	0.0048	0.0012	0.0050	7.39%	1.87%	7.62%	4.071

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: 126

Sample # 160811

Lab Values

# Labs Reporting: 80

Liquid Organic

Issue Date : 09/30/2016

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 (%)	0231	4.120	0.0600	4.417	0.1243	0.0404	9	-2.21	3%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0309	4.350	0.0800	4.417	0.1243	0.0404	9	-0.50	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0090	4.360	0.0200	4.417	0.1243	0.0404	9	-0.42	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0405	4.360	0.0040	4.417	0.1243	0.0404	9	-0.42	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0169	4.395	0.0300	4.417	0.1243	0.0404	9	-0.16	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0444	4.450	0.0800	4.417	0.1243	0.0404	9	0.24	0%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0456	4.500	0.0400	4.417	0.1243	0.0404	9	0.62	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0481	4.505	0.0300	4.417	0.1243	0.0404	9	0.65	1%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0486	4.640	0.0200	4.417	0.1243	0.0404	9	1.66	3%	0
001.10	Ammoniacal Nitrogen, Magnesium Oxide Method (%)	0230	13.90	0.4000	4.417	0.1243	0.0404	9	70.43	107%	2
001.99	Ammoniacal Nitrogen, Other (%)	0487	4.200	0.0000	4.426	0.1735	0.0314	13	-1.30	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0511	4.270	0.0000	4.426	0.1735	0.0314	13	-0.90	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0027	4.282	0.0180	4.426	0.1735	0.0314	13	-0.83	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0522	4.300	0.0000	4.426	0.1735	0.0314	13	-0.73	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0371	4.345	0.0100	4.426	0.1735	0.0314	13	-0.47	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0420	4.350	0.1000	4.426	0.1735	0.0314	13	-0.44	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0510	4.384	0.0000	4.426	0.1735	0.0314	13	-0.24	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0368	4.470	0.1600	4.426	0.1735	0.0314	13	0.25	0%	0
001.99	Ammoniacal Nitrogen, Other (%)	0096	4.495	0.0100	4.426	0.1735	0.0314	13	0.40	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0519	4.555	0.0100	4.426	0.1735	0.0314	13	0.74	1%	0
001.99	Ammoniacal Nitrogen, Other (%)	0220	4.565	0.0500	4.426	0.1735	0.0314	13	0.80	2%	0
001.99	Ammoniacal Nitrogen, Other (%)	0520	4.650	0.0200	4.426	0.1735	0.0314	13	1.29	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0506	4.675	0.0300	4.426	0.1735	0.0314	13	1.43	3%	0
001.99	Ammoniacal Nitrogen, Other (%)	0524	3.985	0.3300	4.426	0.1735	0.0314	13	-2.54	5%	1
003.99	Water Insoluble Nitrogen, Other (%)	0500	4.880	0.0200				1			0
005.00	Urea Nitrogen, Urease (as N) (%)	0368	0.3170	0.0160				2			0
005.00	Urea Nitrogen, Urease (as N) (%)	0027	0.6450	0.0100				2			0
005.99	Urea Nitrogen, Other (%)	0519	0.5400	0.0000	0.7267	0.1536	0.0267	6	-1.08	13%	0
005.99	Urea Nitrogen, Other (%)	0520	0.6300	0.0000	0.7267	0.1536	0.0267	6	-0.56	7%	0
005.99	Urea Nitrogen, Other (%)	0356	0.6600	0.0200	0.7267	0.1536	0.0267	6	-0.39	5%	0
005.99	Urea Nitrogen, Other (%)	0513	0.8150	0.0100	0.7267	0.1536	0.0267	6	0.51	6%	0
005.99	Urea Nitrogen, Other (%)	0309	0.8350	0.0900	0.7267	0.1536	0.0267	6	0.63	7%	0
005.99	Urea Nitrogen, Other (%)	0506	0.8800	0.0400	0.7267	0.1536	0.0267	6	0.89	11%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
007.00	Urea, Urease (as Urea) (%)	0486	0.6900	0.0200				1			0
007.99	Urea, Other (%)	0220	1.375	0.3500				2			0
007.99	Urea, Other (%)	0513	1.775	0.0300				2			0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0513	4.920	0.0400	5.200	0.2582	0.0475	8	-0.99	3%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0309	4.995	0.0300	5.200	0.2582	0.0475	8	-0.72	2%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0522	5.035	0.0100	5.200	0.2582	0.0475	8	-0.58	2%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0371	5.105	0.0300	5.200	0.2582	0.0475	8	-0.34	1%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0105	5.220	0.0200	5.200	0.2582	0.0475	8	0.07	0%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0090	5.360	0.1600	5.200	0.2582	0.0475	8	0.57	2%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0510	5.375	0.0000	5.200	0.2582	0.0475	8	0.62	2%	0
010.11	Total Nitrogen, Modified Comprehensive (5%)	0220	5.645	0.0900	5.200	0.2582	0.0475	8	1.58	4%	0
010.12	Total Nitrogen, Salicylic (5%)	0481	5.035	0.0500				1			0
010.17	Total Nitrogen, Comprehensive (5%)	0211	5.070	0.0200				1			0
010.60	Total Nitrogen, Combustion (5%)	0421	4.840	0.1000	5.195	0.1665	0.0720	50	-2.13	3%	0
010.60	Total Nitrogen, Combustion (5%)	0307	4.920	0.3400	5.195	0.1665	0.0720	50	-1.65	3%	0
010.60	Total Nitrogen, Combustion (5%)	0368	4.920	0.0800	5.195	0.1665	0.0720	50	-1.65	3%	0
010.60	Total Nitrogen, Combustion (5%)	0042	4.950	0.3000	5.195	0.1665	0.0720	50	-1.47	2%	0
010.60	Total Nitrogen, Combustion (5%)	0472	4.975	0.0100	5.195	0.1665	0.0720	50	-1.32	2%	0
010.60	Total Nitrogen, Combustion (5%)	0511	5.020	0.0000	5.195	0.1665	0.0720	50	-1.05	2%	0
010.60	Total Nitrogen, Combustion (5%)	0354	5.036	0.0130	5.195	0.1665	0.0720	50	-0.96	2%	0
010.60	Total Nitrogen, Combustion (5%)	0482	5.050	0.0400	5.195	0.1665	0.0720	50	-0.87	1%	0
010.60	Total Nitrogen, Combustion (5%)	0292	5.060	0.0200	5.195	0.1665	0.0720	50	-0.81	1%	0
010.60	Total Nitrogen, Combustion (5%)	0389	5.060	0.0200	5.195	0.1665	0.0720	50	-0.81	1%	0
010.60	Total Nitrogen, Combustion (5%)	0095	5.070	0.0400	5.195	0.1665	0.0720	50	-0.75	1%	0
010.60	Total Nitrogen, Combustion (5%)	0483	5.071	0.0180	5.195	0.1665	0.0720	50	-0.75	1%	0
010.60	Total Nitrogen, Combustion (5%)	0041	5.075	0.0700	5.195	0.1665	0.0720	50	-0.72	1%	0
010.60	Total Nitrogen, Combustion (5%)	0177	5.091	0.0630	5.195	0.1665	0.0720	50	-0.63	1%	0
010.60	Total Nitrogen, Combustion (5%)	0457	5.101	0.0100	5.195	0.1665	0.0720	50	-0.57	1%	0
010.60	Total Nitrogen, Combustion (5%)	0049	5.115	0.1100	5.195	0.1665	0.0720	50	-0.48	1%	0
010.60	Total Nitrogen, Combustion (5%)	0102	5.120	0.1200	5.195	0.1665	0.0720	50	-0.45	1%	0
010.60	Total Nitrogen, Combustion (5%)	0452	5.130	0.0200	5.195	0.1665	0.0720	50	-0.39	1%	0
010.60	Total Nitrogen, Combustion (5%)	0481	5.135	0.0500	5.195	0.1665	0.0720	50	-0.36	1%	0
010.60	Total Nitrogen, Combustion (5%)	0131	5.140	0.0800	5.195	0.1665	0.0720	50	-0.33	1%	0
010.60	Total Nitrogen, Combustion (5%)	0494	5.140	0.0200	5.195	0.1665	0.0720	50	-0.33	1%	0
010.60	Total Nitrogen, Combustion (5%)	0234	5.145	0.0300	5.195	0.1665	0.0720	50	-0.30	0%	0
010.60	Total Nitrogen, Combustion (5%)	0523	5.150	0.1000	5.195	0.1665	0.0720	50	-0.27	0%	0
010.60	Total Nitrogen, Combustion (5%)	0035	5.160	0.1200	5.195	0.1665	0.0720	50	-0.21	0%	0
010.60	Total Nitrogen, Combustion (5%)	0233	5.191	0.1590	5.195	0.1665	0.0720	50	-0.03	0%	0
010.60	Total Nitrogen, Combustion (5%)	0422	5.200	0.0200	5.195	0.1665	0.0720	50	0.03	0%	0
010.60	Total Nitrogen, Combustion (5%)	0086	5.201	0.2241	5.195	0.1665	0.0720	50	0.03	0%	0
010.60	Total Nitrogen, Combustion (5%)	0105	5.221	0.0325	5.195	0.1665	0.0720	50	0.15	0%	0
010.60	Total Nitrogen, Combustion (5%)	0055	5.230	0.0200	5.195	0.1665	0.0720	50	0.21	0%	0
010.60	Total Nitrogen, Combustion (5%)	0521	5.242	0.0000	5.195	0.1665	0.0720	50	0.28	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 (5%)	0136	5.250	0.0400	5.195	0.1665	0.0720	50	0.33	1%	0
010.60	Total Nitrogen, Combustion (5%)	0034	5.257	0.0410	5.195	0.1665	0.0720	50	0.37	1%	0
010.60	Total Nitrogen, Combustion (5%)	0231	5.260	0.0200	5.195	0.1665	0.0720	50	0.39	1%	0
010.60	Total Nitrogen, Combustion (5%)	0025	5.270	0.0050	5.195	0.1665	0.0720	50	0.44	1%	0
010.60	Total Nitrogen, Combustion (5%)	0023	5.272	0.0073	5.195	0.1665	0.0720	50	0.46	1%	0
010.60	Total Nitrogen, Combustion (5%)	0451	5.278	0.0980	5.195	0.1665	0.0720	50	0.50	1%	0
010.60	Total Nitrogen, Combustion (5%)	0073	5.280	0.1000	5.195	0.1665	0.0720	50	0.51	1%	0
010.60	Total Nitrogen, Combustion (5%)	0157	5.285	0.0100	5.195	0.1665	0.0720	50	0.54	1%	0
010.60	Total Nitrogen, Combustion (5%)	0291	5.295	0.0100	5.195	0.1665	0.0720	50	0.60	1%	0
010.60	Total Nitrogen, Combustion (5%)	0029	5.306	0.0080	5.195	0.1665	0.0720	50	0.66	1%	0
010.60	Total Nitrogen, Combustion (5%)	0007	5.350	0.3000	5.195	0.1665	0.0720	50	0.93	1%	0
010.60	Total Nitrogen, Combustion (5%)	0040	5.350	0.1000	5.195	0.1665	0.0720	50	0.93	1%	0
010.60	Total Nitrogen, Combustion (5%)	0324	5.360	0.0600	5.195	0.1665	0.0720	50	0.99	2%	0
010.60	Total Nitrogen, Combustion (5%)	0444	5.410	0.1600	5.195	0.1665	0.0720	50	1.29	2%	0
010.60	Total Nitrogen, Combustion (5%)	0325	5.420	0.0400	5.195	0.1665	0.0720	50	1.35	2%	0
010.60	Total Nitrogen, Combustion (5%)	0096	5.440	0.0400	5.195	0.1665	0.0720	50	1.47	2%	0
010.60	Total Nitrogen, Combustion (5%)	0486	5.440	0.0200	5.195	0.1665	0.0720	50	1.47	2%	0
010.60	Total Nitrogen, Combustion (5%)	0072	5.450	0.1000	5.195	0.1665	0.0720	50	1.53	2%	0
010.60	Total Nitrogen, Combustion (5%)	0260	5.620	0.0200	5.195	0.1665	0.0720	50	2.55	4%	0
010.60	Total Nitrogen, Combustion (5%)	0360	5.785	0.1900	5.195	0.1665	0.0720	50	3.54	6%	0
010.60	Total Nitrogen, Combustion (5%)	0230	5.300	0.6200	5.195	0.1665	0.0720	50	0.63	1%	1
010.60	Total Nitrogen, Combustion (5%)	0356	3.560*	0.0000	5.195	0.1665	0.0720	50	-9.82	16%	2
010.99	Total Nitrogen, Other (5%)	0487	4.900	0.0000	5.165	0.1827	0.0655	11	-1.36	3%	0
010.99	Total Nitrogen, Other (5%)	0513	4.985	0.0500	5.165	0.1827	0.0655	11	-0.92	2%	0
010.99	Total Nitrogen, Other (5%)	0027	5.095	0.1100	5.165	0.1827	0.0655	11	-0.36	1%	0
010.99	Total Nitrogen, Other (5%)	0493	5.100	0.1000	5.165	0.1827	0.0655	11	-0.33	1%	0
010.99	Total Nitrogen, Other (5%)	0519	5.105	0.0100	5.165	0.1827	0.0655	11	-0.31	1%	0
010.99	Total Nitrogen, Other (5%)	0522	5.115	0.0500	5.165	0.1827	0.0655	11	-0.26	0%	0
010.99	Total Nitrogen, Other (5%)	0508	5.140	0.0400	5.165	0.1827	0.0655	11	-0.13	0%	0
010.99	Total Nitrogen, Other (5%)	0520	5.280	0.0200	5.165	0.1827	0.0655	11	0.59	1%	0
010.99	Total Nitrogen, Other (5%)	0420	5.325	0.2300	5.165	0.1827	0.0655	11	0.82	2%	0
010.99	Total Nitrogen, Other (5%)	0524	5.330	0.0400	5.165	0.1827	0.0655	11	0.85	2%	0
010.99	Total Nitrogen, Other (5%)	0506	5.555	0.0700	5.165	0.1827	0.0655	11	2.00	4%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0444	19.23	0.1500	19.58	0.2882	0.1850	8	-1.12	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0494	19.27	0.4500	19.58	0.2882	0.1850	8	-1.00	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0157	19.40	0.2000	19.58	0.2882	0.1850	8	-0.57	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0105	19.63	0.1700	19.58	0.2882	0.1850	8	0.15	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0049	19.64	0.2800	19.58	0.2882	0.1850	8	0.19	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0211	19.75	0.0800	19.58	0.2882	0.1850	8	0.54	0%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0493	19.85	0.1000	19.58	0.2882	0.1850	8	0.86	1%	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0090	19.88	0.0500	19.58	0.2882	0.1850	8	0.94	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0415	18.90	0.0126	19.51	0.3799	0.2393	16	-1.60	2%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	19.05	0.5500	19.51	0.3799	0.2393	16	-1.21	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				
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0371	19.14	0.0200	19.51	0.3799	0.2393	16	-0.96	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0169	19.23	0.0500	19.51	0.3799	0.2393	16	-0.74	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0481	19.26	0.0000	19.51	0.3799	0.2393	16	-0.65	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0177	19.36	0.0019	19.51	0.3799	0.2393	16	-0.38	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0522	19.44	1.030	19.51	0.3799	0.2393	16	-0.19	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0457	19.46	0.1900	19.51	0.3799	0.2393	16	-0.14	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	19.60	0.2000	19.51	0.3799	0.2393	16	0.25	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	19.62	0.3100	19.51	0.3799	0.2393	16	0.29	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	19.64	0.0600	19.51	0.3799	0.2393	16	0.35	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0506	19.70	0.8000	19.51	0.3799	0.2393	16	0.51	0%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0428	19.72	0.1980	19.51	0.3799	0.2393	16	0.56	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	19.89	0.0100	19.51	0.3799	0.2393	16	1.00	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	20.01	0.0159	19.51	0.3799	0.2393	16	1.33	1%	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0420	20.29	0.3800	19.51	0.3799	0.2393	16	2.06	2%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0096	11.08	0.1400	17.73	3.718	0.1360	5	-1.56	19%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0042	19.15	0.5000	17.73	3.718	0.1360	5	0.33	4%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0500	19.41	0.0100	17.73	3.718	0.1360	5	0.39	5%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0105	19.48	0.0000	17.73	3.718	0.1360	5	0.41	5%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0456	19.52	0.0300	17.73	3.718	0.1360	5	0.42	5%	0
020.40	Total Phosphorus as P2O5, Automated (%)	0035	20.60	2.060	17.73	3.718	0.1360	5	0.67	8%	1
020.50	Total Phosphorus as P2O5, ICP (%)	0157	18.30	0.2000	19.92	1.188	0.2728	18	-1.36	4%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0523	18.75	0.5000	19.92	1.188	0.2728	18	-0.98	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	18.79	0.1400	19.92	1.188	0.2728	18	-0.95	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	18.87	0.2400	19.92	1.188	0.2728	18	-0.88	3%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0524	19.11	0.5429	19.92	1.188	0.2728	18	-0.68	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	19.23	0.1500	19.92	1.188	0.2728	18	-0.58	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	19.47	0.3500	19.92	1.188	0.2728	18	-0.38	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0433	19.72	0.0320	19.92	1.188	0.2728	18	-0.16	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	19.80	1.200	19.92	1.188	0.2728	18	-0.10	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	19.84	0.3700	19.92	1.188	0.2728	18	-0.07	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0508	19.87	0.1300	19.92	1.188	0.2728	18	-0.05	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0368	19.96	0.3260	19.92	1.188	0.2728	18	0.03	0%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0307	20.47	0.3390	19.92	1.188	0.2728	18	0.47	1%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0452	20.56	0.0300	19.92	1.188	0.2728	18	0.53	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0483	20.73	0.1100	19.92	1.188	0.2728	18	0.68	2%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0422	22.27	0.2000	19.92	1.188	0.2728	18	1.98	6%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0421	24.53	0.0500	19.92	1.188	0.2728	18	3.88	12%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0521	27.00	0.0000	19.92	1.188	0.2728	18	5.96	18%	0
020.50	Total Phosphorus as P2O5, ICP (%)	0260	23.98	4.570	19.92	1.188	0.2728	18	3.41	10%	1
020.99	Total Phosphorus as P2O5, Other (%)	0487	19.35	0.1000	19.65	0.4435	0.0433	3	-0.67	1%	0
020.99	Total Phosphorus as P2O5, Other (%)	0513	19.43	0.0200	19.65	0.4435	0.0433	3	-0.48	1%	0
020.99	Total Phosphorus as P2O5, Other (%)	0520	20.16	0.0100	19.65	0.4435	0.0433	3	1.15	1%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (20%)	0086	19.54	0.0463	19.68	0.2338	0.2154	3	-0.60	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				
041.10	Direct Available Phosphorus as P2O5, Gravimet... (20%)	0040	19.55	0.1000	19.68	0.2338	0.2154	3	-0.56	0%	0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (20%)	0102	19.95	0.5000	19.68	0.2338	0.2154	3	1.15	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (20%)	0220	19.04	0.0000	19.31	0.2524	0.0400	3	-1.07	1%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (20%)	0055	19.35	0.0800	19.31	0.2524	0.0400	3	0.16	0%	0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (20%)	0105	19.54	0.0400	19.31	0.2524	0.0400	3	0.91	1%	0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (20%)	0027	19.36	0.1530				2			0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (20%)	0519	19.51	0.0100				2			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (20%)	0522	19.52	0.1700				1			0
041.40	Direct Available Phosphorus as P2O5, Automate... (20%)	0095	19.53	0.0300				2			0
041.40	Direct Available Phosphorus as P2O5, Automate... (20%)	0131	19.84	0.2400				2			0
041.50	Direct Available Phosphorus as P2O5, ICP (20%)	0007	18.55*	0.7000	19.53	0.9293	0.7890	3	-1.05	3%	0
041.50	Direct Available Phosphorus as P2O5, ICP (20%)	0368	19.63	0.0670	19.53	0.9293	0.7890	3	0.11	0%	0
041.50	Direct Available Phosphorus as P2O5, ICP (20%)	0325	20.40	1.600	19.53	0.9293	0.7890	3	0.94	2%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (20%)	0117	18.87	0.1900	19.32	0.4536	0.2155	6	-0.90	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (20%)	0494	19.05	0.3000	19.32	0.4536	0.2155	6	-0.53	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (20%)	0360	19.10	0.0700	19.32	0.4536	0.2155	6	-0.44	1%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (20%)	0025	19.47	0.3430	19.32	0.4536	0.2155	6	0.30	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (20%)	0377	19.48	0.3500	19.32	0.4536	0.2155	6	0.30	0%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (20%)	0023	19.97	0.0400	19.32	0.4536	0.2155	6	1.27	2%	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (20%)	0511	19.34	1.530	19.32	0.4536	0.2155	6	0.03	0%	1
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0472	11.74*	0.1600	19.31	0.5319	0.0973	10	-13.23	20%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0486	17.58*	0.1300	19.31	0.5319	0.0973	10	-3.03	4%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0029	19.05	0.0700	19.31	0.5319	0.0973	10	-0.46	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0073	19.41	0.3300	19.31	0.5319	0.0973	10	0.17	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0105	19.43	0.0600	19.31	0.5319	0.0973	10	0.22	0%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0513	19.50	0.0800	19.31	0.5319	0.0973	10	0.34	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0034	19.52	0.0190	19.31	0.5319	0.0973	10	0.38	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0231	19.64	0.0800	19.31	0.5319	0.0973	10	0.58	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0136	19.65	0.0100	19.31	0.5319	0.0973	10	0.59	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0354	19.86	0.0340	19.31	0.5319	0.0973	10	0.96	1%	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (20%)	0230	12.90*	1.200	19.31	0.5319	0.0973	10	-11.20	17%	1
041.99	Direct Available Phosphorus as P2O5, Other (20%)	0105	19.51	0.0700				1			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0420	11.49	0.2400				2			0
048.20	Water Soluble Phosphorus as P2O5, Spectrophot... (%)	0415	18.21	0.0262				2			0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0444	19.58	0.2500				1			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0513	16.48	0.0300				2			0
048.99	Water Soluble Phosphorus as P2O5, Other (%)	0520	19.56	0.0100				2			0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0405	3.690	0.0200	3.955	0.2118	0.0344	9	-1.15	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0090	3.785	0.0500	3.955	0.2118	0.0344	9	-0.74	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0231	3.825	0.0500	3.955	0.2118	0.0344	9	-0.57	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0211	3.870	0.0400	3.955	0.2118	0.0344	9	-0.37	1%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0522	3.930	0.0200	3.955	0.2118	0.0344	9	-0.11	0%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0220	3.970	0.0000	3.955	0.2118	0.0344	9	0.07	0%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0055	4.095	0.0100	3.955	0.2118	0.0344	9	0.61	2%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0494	4.205	0.0500	3.955	0.2118	0.0344	9	1.09	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0049	4.225	0.0700	3.955	0.2118	0.0344	9	1.18	3%	0
050.00	Soluble Potassium as K2O, STPB Oxalate (4%)	0102	3.900	0.2000	3.955	0.2118	0.0344	9	-0.24	1%	1
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0309	3.610	0.5400	3.977	0.4520	0.1717	7	-0.73	5%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0136	3.640	0.0800	3.977	0.4520	0.1717	7	-0.67	4%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0040	3.650	0.1000	3.977	0.4520	0.1717	7	-0.65	4%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0157	3.875	0.0300	3.977	0.4520	0.1717	7	-0.20	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0073	4.095	0.0900	3.977	0.4520	0.1717	7	0.24	1%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0428	4.315	0.3020	3.977	0.4520	0.1717	7	0.67	4%	0
050.30	Soluble Potassium as K2O, AA (Oxalate) (4%)	0356	4.890	0.0600	3.977	0.4520	0.1717	7	1.83	11%	0
050.31	Soluble Potassium as K2O, AA (Citrate) (4%)	0472	4.010	0.0400				1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0055	3.575	0.0460	3.912	0.2532	0.0686	8	-1.22	4%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0157	3.730	0.1800	3.912	0.2532	0.0686	8	-0.66	2%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0230	3.860	0.1200	3.912	0.2532	0.0686	8	-0.19	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0292	3.865	0.0500	3.912	0.2532	0.0686	8	-0.17	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0422	3.880	0.0200	3.912	0.2532	0.0686	8	-0.12	0%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0324	3.960	0.0000	3.912	0.2532	0.0686	8	0.17	1%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0444	4.135	0.1300	3.912	0.2532	0.0686	8	0.81	3%	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (4%)	0420	5.182	0.0030	3.912	0.2532	0.0686	8	4.59	16%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0007	3.750	0.1000	3.915	0.1544	0.1140	5	-0.93	2%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0483	3.830	0.0800	3.915	0.1544	0.1140	5	-0.48	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0291	3.870	0.0000	3.915	0.1544	0.1140	5	-0.25	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0511	3.975	0.3100	3.915	0.1544	0.1140	5	0.34	1%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0452	4.150	0.0800	3.915	0.1544	0.1140	5	1.33	3%	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (4%)	0260	5.145	1.090	3.915	0.1544	0.1140	5	6.96	16%	1
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0025	3.815	0.0410	4.018	0.1758	0.0536	8	-1.06	3%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0360	3.920	0.0200	4.018	0.1758	0.0536	8	-0.51	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0377	3.920	0.0200	4.018	0.1758	0.0536	8	-0.51	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0117	3.925	0.0740	4.018	0.1758	0.0536	8	-0.48	1%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0023	4.045	0.1100	4.018	0.1758	0.0536	8	0.14	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0486	4.050	0.1000	4.018	0.1758	0.0536	8	0.17	0%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0494	4.185	0.0300	4.018	0.1758	0.0536	8	0.87	2%	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (4%)	0354	4.322	0.0340	4.018	0.1758	0.0536	8	1.58	4%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (4%)	0041	3.325*	0.2300	3.902	0.4344	0.0700	4	-1.33	7%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (4%)	0105	3.815	0.0100	3.902	0.4344	0.0700	4	-0.20	1%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (4%)	0510	4.190	0.0000	3.902	0.4344	0.0700	4	0.66	4%	0
050.60	Soluble Potassium as K2O, Flame Photometric ... (4%)	0169	4.280	0.0400	3.902	0.4344	0.0700	4	0.87	5%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (4%)	0456	3.520*	0.1600	3.915	0.3531	0.1300	3	-1.12	5%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (4%)	0131	4.025	0.0300	3.915	0.3531	0.1300	3	0.31	1%	0
050.61	Soluble Potassium as K2O, Flame Photometric ... (4%)	0035	4.200	0.2000	3.915	0.3531	0.1300	3	0.81	4%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (4%)	0034	3.717	0.2330	3.788	0.0788	0.0726	5	-0.91	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric ... (4%)	0029	3.720	0.0200	3.788	0.0788	0.0726	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				
050.62	Soluble Potassium as K2O, Flame Photometric (... (4%)	0105	3.770	0.0400	3.788	0.0788	0.0726	5	-0.23	0%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (4%)	0513	3.835	0.0700	3.788	0.0788	0.0726	5	0.59	1%	0
050.62	Soluble Potassium as K2O, Flame Photometric (... (4%)	0095	3.900	0.0000	3.788	0.0788	0.0726	5	1.42	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0500	3.470*	0.0000	4.006	0.2175	0.0762	26	-2.46	7%	0
050.99	Soluble Potassium as K2O, Other (4%)	0523	3.750	0.1000	4.006	0.2175	0.0762	26	-1.18	3%	0
050.99	Soluble Potassium as K2O, Other (4%)	0096	3.805	0.0100	4.006	0.2175	0.0762	26	-0.92	3%	0
050.99	Soluble Potassium as K2O, Other (4%)	0105	3.810	0.0000	4.006	0.2175	0.0762	26	-0.90	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0482	3.810	0.2000	4.006	0.2175	0.0762	26	-0.90	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0524	3.819	0.1145	4.006	0.2175	0.0762	26	-0.86	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0493	3.880	0.1000	4.006	0.2175	0.0762	26	-0.58	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0433	3.897	0.0530	4.006	0.2175	0.0762	26	-0.50	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0457	3.900	0.0390	4.006	0.2175	0.0762	26	-0.49	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0177	3.924	0.0143	4.006	0.2175	0.0762	26	-0.38	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0389	3.945	0.0300	4.006	0.2175	0.0762	26	-0.28	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0368	3.946	0.0787	4.006	0.2175	0.0762	26	-0.27	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0487	3.950	0.1000	4.006	0.2175	0.0762	26	-0.26	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0520	3.985	0.0100	4.006	0.2175	0.0762	26	-0.10	0%	0
050.99	Soluble Potassium as K2O, Other (4%)	0506	3.995	0.1900	4.006	0.2175	0.0762	26	-0.05	0%	0
050.99	Soluble Potassium as K2O, Other (4%)	0042	4.000	0.0000	4.006	0.2175	0.0762	26	-0.03	0%	0
050.99	Soluble Potassium as K2O, Other (4%)	0234	4.010	0.0400	4.006	0.2175	0.0762	26	0.02	0%	0
050.99	Soluble Potassium as K2O, Other (4%)	0307	4.049	0.0210	4.006	0.2175	0.0762	26	0.20	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0519	4.080	0.0000	4.006	0.2175	0.0762	26	0.34	1%	0
050.99	Soluble Potassium as K2O, Other (4%)	0325	4.150	0.3000	4.006	0.2175	0.0762	26	0.66	2%	0
050.99	Soluble Potassium as K2O, Other (4%)	0451	4.225	0.0900	4.006	0.2175	0.0762	26	1.01	3%	0
050.99	Soluble Potassium as K2O, Other (4%)	0508	4.250	0.0800	4.006	0.2175	0.0762	26	1.12	3%	0
050.99	Soluble Potassium as K2O, Other (4%)	0027	4.296	0.1810	4.006	0.2175	0.0762	26	1.33	4%	0
050.99	Soluble Potassium as K2O, Other (4%)	0421	4.815	0.2000	4.006	0.2175	0.0762	26	3.72	10%	0
050.99	Soluble Potassium as K2O, Other (4%)	0481	5.565	0.0300	4.006	0.2175	0.0762	26	7.17	19%	0
050.99	Soluble Potassium as K2O, Other (4%)	0521	5.570	0.0000	4.006	0.2175	0.0762	26	7.19	20%	0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (%)	0105	0.0148	0.0012				1			0
101.03	Acid Soluble Calcium, AA, 965.09, test portio... (%)	0105	0.0166	0.0009				1			0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0102	0.0122	0.0021	0.0209	0.0096	0.0079	7	-0.83	21%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0472	0.0150	0.0100	0.0209	0.0096	0.0079	7	-0.56	14%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0420	0.0151	0.0004	0.0209	0.0096	0.0079	7	-0.55	14%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0096	0.0195	0.0010	0.0209	0.0096	0.0079	7	-0.14	3%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0482	0.0200	0.0000	0.0209	0.0096	0.0079	7	-0.09	2%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0035	0.0295	0.0230	0.0209	0.0096	0.0079	7	0.81	20%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0354	0.1175	0.0190	0.0209	0.0096	0.0079	7	9.09	231%	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (%)	0483	0.2300	0.0600	0.0209	0.0096	0.0079	7	19.68	499%	1
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0521	0.0185	0.0000				1			0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0117	0.0140	0.0024	0.0200	0.0088	0.0011	3	-0.68	15%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0494	0.0159	0.0009	0.0200	0.0088	0.0011	3	-0.47	10%	0
101.33	Acid Soluble Calcium, ICP, test portion 2006.... (%)	0421	0.0300	0.0000	0.0200	0.0088	0.0011	3	1.15	25%	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				
101.99	Acid Soluble Calcium, Other (%)	0389	0.0175	0.0050				1			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.05%)	0105	0.1195	0.0047	0.1276	0.0104	0.0018	6	-0.70	3%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.05%)	0029	0.1199	0.0023	0.1276	0.0104	0.0018	6	-0.66	3%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.05%)	0457	0.1230	0.0020	0.1276	0.0104	0.0018	6	-0.39	2%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.05%)	0040	0.1270	0.0020	0.1276	0.0104	0.0018	6	-0.05	0%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.05%)	0157	0.1330	0.0000	0.1276	0.0104	0.0018	6	0.47	2%	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.05%)	0481	0.2100	0.0000	0.1276	0.0104	0.0018	6	7.08	32%	0
121.03	Acid Soluble Magnesium, AA, 965.09, test port... (0.05%)	0105	0.1118	0.0037				1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0519	0.0650	0.0100	0.1223	0.0089	0.0046	24	-6.47	23%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0307	0.0700	0.0060	0.1223	0.0089	0.0046	24	-5.91	21%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0324	0.1125	0.0030	0.1223	0.0089	0.0046	24	-1.11	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0055	0.1150	0.0100	0.1223	0.0089	0.0046	24	-0.83	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0231	0.1150	0.0100	0.1223	0.0089	0.0046	24	-0.83	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0230	0.1165	0.0010	0.1223	0.0089	0.0046	24	-0.66	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0035	0.1170	0.0040	0.1223	0.0089	0.0046	24	-0.60	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0377	0.1195	0.0070	0.1223	0.0089	0.0046	24	-0.32	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0220	0.1200	0.0000	0.1223	0.0089	0.0046	24	-0.26	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0234	0.1200	0.0000	0.1223	0.0089	0.0046	24	-0.26	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0360	0.1200	0.0000	0.1223	0.0089	0.0046	24	-0.26	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0452	0.1200	0.0000	0.1223	0.0089	0.0046	24	-0.26	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0157	0.1220	0.0020	0.1223	0.0089	0.0046	24	-0.04	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0354	0.1220	0.0140	0.1223	0.0089	0.0046	24	-0.04	0%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0095	0.1250	0.0100	0.1223	0.0089	0.0046	24	0.30	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0096	0.1250	0.0100	0.1223	0.0089	0.0046	24	0.30	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0482	0.1250	0.0100	0.1223	0.0089	0.0046	24	0.30	1%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0102	0.1268	0.0001	0.1223	0.0089	0.0046	24	0.50	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0368	0.1284	0.0015	0.1223	0.0089	0.0046	24	0.68	2%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0444	0.1300	0.0000	0.1223	0.0089	0.0046	24	0.86	3%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0433	0.1317	0.0042	0.1223	0.0089	0.0046	24	1.06	4%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0511	0.1400	0.0000	0.1223	0.0089	0.0046	24	1.99	7%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0483	0.1715	0.0070	0.1223	0.0089	0.0046	24	5.55	20%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0420	0.2001	0.0004	0.1223	0.0089	0.0046	24	8.78	32%	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0472	0.0500	0.0600	0.1223	0.0089	0.0046	24	-8.17	30%	1
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.05%)	0291	19.57	0.0200	0.1223	0.0089	0.0046	24	2195.75	7948%	2
121.32	Acid Soluble Magnesium, ICP, test portion 200... (0.05%)	0521	0.1442	0.0000				1			0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (0.05%)	0515	0.1100	0.0051	0.3861	0.5142	0.0147	5	-0.54	36%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (0.05%)	0117	0.1245	0.0043	0.3861	0.5142	0.0147	5	-0.51	34%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (0.05%)	0037	0.1275	0.0050	0.3861	0.5142	0.0147	5	-0.50	33%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (0.05%)	0421	0.2700	0.0400	0.3861	0.5142	0.0147	5	-0.23	15%	0
121.33	Acid Soluble Magnesium, ICP, test portion 200... (0.05%)	0494	1.299	0.0190	0.3861	0.5142	0.0147	5	1.77	118%	0
121.99	Acid Soluble Magnesium, Other (0.05%)	0042	0.0640	0.0020	0.1026	0.0275	0.0007	7	-1.27	19%	0
121.99	Acid Soluble Magnesium, Other (0.05%)	0506	0.0800	0.0000	0.1026	0.0275	0.0007	7	-0.74	11%	0
121.99	Acid Soluble Magnesium, Other (0.05%)	0520	0.0965	0.0010	0.1026	0.0275	0.0007	7	-0.20	3%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
121.99	Acid Soluble Magnesium, Other (0.05%)	0027	0.1055	0.0010	0.1026	0.0275	0.0007	7	0.10	1%	0
121.99	Acid Soluble Magnesium, Other (0.05%)	0524	0.1157	0.0001	0.1026	0.0275	0.0007	7	0.43	6%	0
121.99	Acid Soluble Magnesium, Other (0.05%)	0389	0.1265	0.0010	0.1026	0.0275	0.0007	7	0.78	12%	0
121.99	Acid Soluble Magnesium, Other (0.05%)	0523	0.1300	0.0000	0.1026	0.0275	0.0007	7	0.90	13%	0
121.99	Acid Soluble Magnesium, Other (0.05%)	0515	0.1310	0.0197	0.1026	0.0275	0.0007	7	0.93	14%	1
131.30	Water Soluble Magnesium, ICP (%)	0444	0.1100	0.0000				2			0
131.30	Water Soluble Magnesium, ICP (%)	0220	0.1200	0.0000				2			0
143.99	Elemental Sulfur, Other (%)	0472	0.5700	0.0200				2			0
143.99	Elemental Sulfur, Other (%)	0389	0.5820	0.0020				2			0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (%)	0457	0.5361	0.0001				2			0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (%)	0105	0.7000	0.0000				2			0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0292	0.4950	0.0100	0.5685	0.0805	0.0247	6	-0.81	6%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0117	0.5204	0.0328	0.5685	0.0805	0.0247	6	-0.53	4%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0494	0.5306	0.0454	0.5685	0.0805	0.0247	6	-0.42	3%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0102	0.5544	0.0087	0.5685	0.0805	0.0247	6	-0.16	1%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0483	0.6355	0.0210	0.5685	0.0805	0.0247	6	0.74	6%	0
148.07	Total Sulfur, ICP, test portion as in 2006.03... (%)	0421	0.6750	0.0300	0.5685	0.0805	0.0247	6	1.18	9%	0
148.99	Total Sulfur, Other (%)	0307	0.4295	0.0410	0.4961	0.0472	0.0227	4	-1.41	7%	0
148.99	Total Sulfur, Other (%)	0096	0.5024	0.0047	0.4961	0.0472	0.0227	4	0.13	1%	0
148.99	Total Sulfur, Other (%)	0354	0.5125	0.0050	0.4961	0.0472	0.0227	4	0.35	2%	0
148.99	Total Sulfur, Other (%)	0482	0.5400	0.0400	0.4961	0.0472	0.0227	4	0.93	4%	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0524	0.5456	0.0084				2			0
149.04	Sulfur - HNO3 soluble, ICP (%)	0521	0.7499	0.0000				2			0
151.00	Acid Soluble Arsenic , AA, test portion as in... (ppm)	0136	0.2500	0.1000				1			0
151.30	Acid Soluble Arsenic , ICP (ppm)	0519	0.4100	0.0200	0.5548	0.1340	0.1557	3	-1.08	13%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0511	0.5800	0.0000	0.5548	0.1340	0.1557	3	0.19	2%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0102	0.6745	0.4470	0.5548	0.1340	0.1557	3	0.89	11%	0
151.30	Acid Soluble Arsenic , ICP (ppm)	0368	0.0000	0.0000	0.5548	0.1340	0.1557	3			4
151.33	Acid Soluble Arsenic , ICP, 2006.03 modified ... (ppm)	0515	0.3994	0.2466				1			0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	0.8178	0.3384				1			0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0506	0.0200	0.0000	0.0386	0.0358	0.0018	5	-0.52	24%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0481	0.0225	0.0010	0.0386	0.0358	0.0018	5	-0.45	21%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0220	0.0235	0.0010	0.0386	0.0358	0.0018	5	-0.42	20%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0105	0.0244	0.0059	0.0386	0.0358	0.0018	5	-0.40	18%	0
165.00	Acid Soluble Boron , Spectrophotometric (0.02%)	0055	0.1025	0.0010	0.0386	0.0358	0.0018	5	1.79	83%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0444	0.0215	0.0050	0.0238	0.0022	0.0016	8	-0.97	5%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0324	0.0216	0.0017	0.0238	0.0022	0.0016	8	-0.95	5%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0377	0.0225	0.0010	0.0238	0.0022	0.0016	8	-0.56	3%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0090	0.0240	0.0000	0.0238	0.0022	0.0016	8	0.06	0%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0433	0.0243	0.0011	0.0238	0.0022	0.0016	8	0.17	1%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0521	0.0243	0.0000	0.0238	0.0022	0.0016	8	0.19	1%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0389	0.0255	0.0010	0.0238	0.0022	0.0016	8	0.68	3%	0
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0354	0.0305	0.0030	0.0238	0.0022	0.0016	8	2.74	14%	0

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			Value	Range	Rob Mean	Rob SD	R-bar				
165.30	Acid Soluble Boron , ICP, test portion in 982... (0.02%)	0234	0.0250	0.0100	0.0238	0.0022	0.0016	8	0.48	2%	1
165.99	Acid Soluble Boron , Other (0.02%)	0095	0.0200	0.0000	0.0243	0.0047	0.0005	15	-0.91	9%	0
165.99	Acid Soluble Boron , Other (0.02%)	0231	0.0200	0.0000	0.0243	0.0047	0.0005	15	-0.91	9%	0
165.99	Acid Soluble Boron , Other (0.02%)	0472	0.0200	0.0000	0.0243	0.0047	0.0005	15	-0.91	9%	0
165.99	Acid Soluble Boron , Other (0.02%)	0524	0.0206	0.0006	0.0243	0.0047	0.0005	15	-0.78	8%	0
165.99	Acid Soluble Boron , Other (0.02%)	0230	0.0207	0.0002	0.0243	0.0047	0.0005	15	-0.76	7%	0
165.99	Acid Soluble Boron , Other (0.02%)	0117	0.0218	0.0003	0.0243	0.0047	0.0005	15	-0.54	5%	0
165.99	Acid Soluble Boron , Other (0.02%)	0520	0.0218	0.0000	0.0243	0.0047	0.0005	15	-0.53	5%	0
165.99	Acid Soluble Boron , Other (0.02%)	0452	0.0230	0.0000	0.0243	0.0047	0.0005	15	-0.27	3%	0
165.99	Acid Soluble Boron , Other (0.02%)	0360	0.0235	0.0010	0.0243	0.0047	0.0005	15	-0.16	2%	0
165.99	Acid Soluble Boron , Other (0.02%)	0483	0.0262	0.0003	0.0243	0.0047	0.0005	15	0.40	4%	0
165.99	Acid Soluble Boron , Other (0.02%)	0421	0.0268	0.0005	0.0243	0.0047	0.0005	15	0.53	5%	0
165.99	Acid Soluble Boron , Other (0.02%)	0042	0.0285	0.0030	0.0243	0.0047	0.0005	15	0.91	9%	0
165.99	Acid Soluble Boron , Other (0.02%)	0482	0.0300	0.0000	0.0243	0.0047	0.0005	15	1.23	12%	0
165.99	Acid Soluble Boron , Other (0.02%)	0511	0.0300	0.0000	0.0243	0.0047	0.0005	15	1.23	12%	0
165.99	Acid Soluble Boron , Other (0.02%)	0519	0.0405	0.0010	0.0243	0.0047	0.0005	15	3.47	33%	0
165.99	Acid Soluble Boron , Other (0.02%)	0515	0.0297	0.0078	0.0243	0.0047	0.0005	15	1.16	11%	1
171.99	Water Soluble Boron , Other (%)	0444	0.0210	0.0040	0.0217	0.0006	0.0027	3	-1.15	2%	0
171.99	Water Soluble Boron , Other (%)	0027	0.0220	0.0000	0.0217	0.0006	0.0027	3	0.58	1%	0
171.99	Water Soluble Boron , Other (%)	0307	0.0220	0.0040	0.0217	0.0006	0.0027	3	0.58	1%	0
181.00	Acid Soluble Cadmium , AA, test portion as in... (ppm)	0136	4.700	0.0000				1			0
181.30	Acid Soluble Cadmium , ICP (ppm)	0444	3.735	0.0300	4.707	0.6873	0.1179	13	-1.41	10%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0096	4.000	0.2000	4.707	0.6873	0.1179	13	-1.03	8%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0523	4.170	0.0400	4.707	0.6873	0.1179	13	-0.78	6%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0035	4.180	0.3600	4.707	0.6873	0.1179	13	-0.77	6%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0524	4.197	0.0990	4.707	0.6873	0.1179	13	-0.74	5%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0519	4.540	0.0800	4.707	0.6873	0.1179	13	-0.24	2%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0520	4.870	0.0000	4.707	0.6873	0.1179	13	0.24	2%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0511	4.900	0.0000	4.707	0.6873	0.1179	13	0.28	2%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0102	5.024	0.0140	4.707	0.6873	0.1179	13	0.46	3%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0452	5.225	0.0100	4.707	0.6873	0.1179	13	0.75	6%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0482	5.350	0.3000	4.707	0.6873	0.1179	13	0.94	7%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	5.450	0.1000	4.707	0.6873	0.1179	13	1.08	8%	0
181.30	Acid Soluble Cadmium , ICP (ppm)	0368	5.550	0.3000	4.707	0.6873	0.1179	13	1.23	9%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0494	4.846	0.1374	5.072	0.2304	0.4168	3	-0.98	2%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0037	5.065	0.1300	5.072	0.2304	0.4168	3	-0.03	0%	0
181.33	Acid Soluble Cadmium , ICP, 2006.03 modified ... (ppm)	0515	5.307	0.9830	5.072	0.2304	0.4168	3	1.02	2%	0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	4.587	0.5940				2			0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0230	4.885	0.1300				2			0
181.99	Acid Soluble Cadmium , Other (ppm)	0220	4.800	0.0000	6.278	2.174	0.3167	3	-0.68	12%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0481	5.260	0.3000	6.278	2.174	0.3167	3	-0.47	8%	0
181.99	Acid Soluble Cadmium , Other (ppm)	0506	8.775	0.6500	6.278	2.174	0.3167	3	1.15	20%	0
190.00	Water Soluble Chlorine, Titrimetric (%)	0105	1.320	0.1000				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)	0444	76.88	0.8800	93.23	10.27	0.9409	12	-1.59	9%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0523	81.38	0.2500	93.23	10.27	0.9409	12	-1.16	6%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	84.85	0.9000	93.23	10.27	0.9409	12	-0.82	4%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0027	85.33	0.9940	93.23	10.27	0.9409	12	-0.77	4%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0520	90.00	0.0000	93.23	10.27	0.9409	12	-0.32	2%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	94.35	1.900	93.23	10.27	0.9409	12	0.11	1%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0511	96.30	0.0000	93.23	10.27	0.9409	12	0.30	2%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0519	99.99	0.0500	93.23	10.27	0.9409	12	0.66	4%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0102	101.3	1.417	93.23	10.27	0.9409	12	0.79	4%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	101.5	1.000	93.23	10.27	0.9409	12	0.81	4%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0452	102.5	0.9000	93.23	10.27	0.9409	12	0.90	5%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0368	103.5	3.000	93.23	10.27	0.9409	12	1.00	6%	0
191.30	Acid Soluble Chromium , ICP (ppm)	0482	97.20	4.800	93.23	10.27	0.9409	12	0.39	2%	1
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0117	88.61	2.720	109.4	32.31	5.651	4	-0.64	9%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0494	92.99	3.619	109.4	32.31	5.651	4	-0.51	7%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0037	98.38	2.950	109.4	32.31	5.651	4	-0.34	5%	0
191.33	Acid Soluble Chromium , ICP, 2006.03 modified... (ppm)	0515	157.4	13.32	109.4	32.31	5.651	4	1.49	22%	0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	0230	92.20	0.0000				2			0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	0515	138.5	32.28				2			0
191.99	Acid Soluble Chromium , Other (ppm)	0220	96.00	0.0000	102.6	9.146	3.033	3	-0.72	3%	0
191.99	Acid Soluble Chromium , Other (ppm)	0481	98.65	7.100	102.6	9.146	3.033	3	-0.43	2%	0
191.99	Acid Soluble Chromium , Other (ppm)	0506	113.0	2.000	102.6	9.146	3.033	3	1.14	5%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0519	0.0850	0.0100	0.2850	0.2035	0.0380	5	-0.86	35%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0102	0.1400	0.0200	0.2850	0.2035	0.0380	5	-0.62	25%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0524	0.2000	0.0000	0.2850	0.2035	0.0380	5	-0.36	15%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	0.4500	0.1000	0.2850	0.2035	0.0380	5	0.71	29%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0452	0.5500	0.0600	0.2850	0.2035	0.0380	5	1.14	46%	0
202.30	Acid Soluble Cobalt , ICP (ppm)	0368	0.6500	0.3000	0.2850	0.2035	0.0380	5	1.57	64%	1
202.30	Acid Soluble Cobalt , ICP (ppm)	0511	0.0000	0.0000	0.2850	0.2035	0.0380	5			4
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0494	0.2469	0.0141				2			0
202.33	Acid Soluble Cobalt , ICP, 2006.03 modified w... (ppm)	0515	0.4102	0.1675				2			0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	0.0402	0.0803				0			4
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0368	0.0001	0.0000	0.0009	0.0008	0.0008	4	-0.90	45%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0055	0.0008	0.0001	0.0009	0.0008	0.0008	4	-0.18	9%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0433	0.0009	0.0015	0.0009	0.0008	0.0008	4	-0.07	3%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0483	0.0020	0.0017	0.0009	0.0008	0.0008	4	1.15	57%	0
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0354	0.0000	0.0000	0.0009	0.0008	0.0008	4			4
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0377	0.0000	0.0000	0.0009	0.0008	0.0008	4			4
221.30	Acid Soluble Copper , ICP, test portion inorg... (%)	0511	0.0000	0.0000	0.0009	0.0008	0.0008	4			4
221.32	Acid Soluble Copper , ICP, test portion 2006.... (%)	0521	0.0000	0.0000				0			4
221.33	Acid Soluble Copper , ICP, test portion 2006.... (%)	0515	0.0006	0.0001				1			0
221.99	Acid Soluble Copper , Other (%)	0389	0.0001	0.0000	0.0005	0.0005	0.0001	3	-0.96	41%	0
221.99	Acid Soluble Copper , Other (%)	0515	0.0005	0.0002	0.0005	0.0005	0.0001	3	-0.07	3%	0



Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
221.99	Acid Soluble Copper , Other (%)	0519	0.0010	0.0000	0.0005	0.0005	0.0001	3	1.03	44%	0
221.99	Acid Soluble Copper , Other (%)	0524	0.0000	0.0000	0.0005	0.0005	0.0001	3			4
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.05%)	0481	0.1000*	0.0000	0.1410	0.0357	0.0038	3	-1.15	15%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.05%)	0029	0.1580	0.0114	0.1410	0.0357	0.0038	3	0.48	6%	0
241.00	Acid Soluble Iron, AA, inorganic 965.09 (0.05%)	0105	0.1650	0.0000	0.1410	0.0357	0.0038	3	0.67	9%	0
241.03	Acid Soluble Iron, AA, 965.09, test portion 2... (0.05%)	0105	0.1647	0.0087				1			0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0102	0.06740*	0.0006	0.1622	0.0085	0.0072	22	-11.22	29%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0354	0.1425	0.0050	0.1622	0.0085	0.0072	22	-2.33	6%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0231	0.1500	0.0200	0.1622	0.0085	0.0072	22	-1.45	4%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0433	0.1544	0.0016	0.1622	0.0085	0.0072	22	-0.93	2%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0035	0.1550	0.0060	0.1622	0.0085	0.0072	22	-0.86	2%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0095	0.1600	0.0000	0.1622	0.0085	0.0072	22	-0.27	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0096	0.1600	0.0000	0.1622	0.0085	0.0072	22	-0.27	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0234	0.1600	0.0200	0.1622	0.0085	0.0072	22	-0.27	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0452	0.1600	0.0000	0.1622	0.0085	0.0072	22	-0.27	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0324	0.1625	0.0010	0.1622	0.0085	0.0072	22	0.03	0%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0360	0.1625	0.0010	0.1622	0.0085	0.0072	22	0.03	0%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0090	0.1630	0.0100	0.1622	0.0085	0.0072	22	0.09	0%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0157	0.1635	0.0170	0.1622	0.0085	0.0072	22	0.15	0%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0368	0.1644	0.0044	0.1622	0.0085	0.0072	22	0.25	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0377	0.1650	0.0020	0.1622	0.0085	0.0072	22	0.33	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0472	0.1650	0.0100	0.1622	0.0085	0.0072	22	0.33	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0482	0.1650	0.0100	0.1622	0.0085	0.0072	22	0.33	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0055	0.1661	0.0020	0.1622	0.0085	0.0072	22	0.46	1%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0511	0.1700	0.0000	0.1622	0.0085	0.0072	22	0.92	2%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0483	0.1740	0.0020	0.1622	0.0085	0.0072	22	1.39	4%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0444	0.1750	0.0300	0.1622	0.0085	0.0072	22	1.51	4%	0
241.30	Acid Soluble Iron, ICP, test portion inorgani... (0.05%)	0420	0.2707	0.0149	0.1622	0.0085	0.0072	22	12.82	33%	0
241.32	Acid Soluble Iron, ICP, test portion 2006.03A... (0.05%)	0521	0.2070	0.0000				1			0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.05%)	0515	0.1405	0.0204	0.1623	0.0230	0.0074	5	-0.95	7%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.05%)	0117	0.1475	0.0066	0.1623	0.0230	0.0074	5	-0.64	5%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.05%)	0494	0.1607	0.0039	0.1623	0.0230	0.0074	5	-0.07	1%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.05%)	0037	0.1630	0.0060	0.1623	0.0230	0.0074	5	0.03	0%	0
241.33	Acid Soluble Iron, ICP, test portion 2006.03A... (0.05%)	0421	0.2000	0.0000	0.1623	0.0230	0.0074	5	1.64	12%	0
241.99	Acid Soluble Iron, Other (0.05%)	0519	0.04500*	0.0100	0.1278	0.0396	0.0042	9	-1.93	32%	0
241.99	Acid Soluble Iron, Other (0.05%)	0042	0.07250*	0.0010	0.1278	0.0396	0.0042	9	-1.29	22%	0
241.99	Acid Soluble Iron, Other (0.05%)	0027	0.1195*	0.0010	0.1278	0.0396	0.0042	9	-0.19	3%	0
241.99	Acid Soluble Iron, Other (0.05%)	0506	0.1300*	0.0000	0.1278	0.0396	0.0042	9	0.05	1%	0
241.99	Acid Soluble Iron, Other (0.05%)	0220	0.1440	0.0040	0.1278	0.0396	0.0042	9	0.38	6%	0
241.99	Acid Soluble Iron, Other (0.05%)	0523	0.1480	0.0020	0.1278	0.0396	0.0042	9	0.47	8%	0
241.99	Acid Soluble Iron, Other (0.05%)	0524	0.1522	0.0029	0.1278	0.0396	0.0042	9	0.57	10%	0
241.99	Acid Soluble Iron, Other (0.05%)	0515	0.1546	0.0148	0.1278	0.0396	0.0042	9	0.63	10%	0
241.99	Acid Soluble Iron, Other (0.05%)	0389	0.1610	0.0020	0.1278	0.0396	0.0042	9	0.77	13%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
251.00	Acid Soluble Lead , AA, test portion as in 20... (ppm)	0136	1.000	0.0000				1			0
251.30	Acid Soluble Lead , ICP (ppm)	0519	0.3500	0.0200	0.4741	0.1559	0.0238	5	-0.80	13%	0
251.30	Acid Soluble Lead , ICP (ppm)	0511	0.3700	0.0000	0.4741	0.1559	0.0238	5	-0.67	11%	0
251.30	Acid Soluble Lead , ICP (ppm)	0524	0.3840	0.0180	0.4741	0.1559	0.0238	5	-0.58	10%	0
251.30	Acid Soluble Lead , ICP (ppm)	0452	0.5550	0.0100	0.4741	0.1559	0.0238	5	0.52	9%	0
251.30	Acid Soluble Lead , ICP (ppm)	0102	0.7115	0.0710	0.4741	0.1559	0.0238	5	1.52	25%	0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0494	0.8976	0.0018				2			0
251.33	Acid Soluble Lead , ICP, 2006.03 modified w/9... (ppm)	0515	0.9221	0.4019				2			0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	1.121	0.1310				1			0
261.12	Acid Soluble Manganese , AA, inorganic 965.09... (0.2%)	0457	0.2619	0.0019	0.2741	0.0084	0.0074	4	-1.46	2%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.09... (0.2%)	0029	0.2760	0.0160	0.2741	0.0084	0.0074	4	0.22	0%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.09... (0.2%)	0040	0.2780	0.0060	0.2741	0.0084	0.0074	4	0.46	1%	0
261.12	Acid Soluble Manganese , AA, inorganic 965.09... (0.2%)	0105	0.2807	0.0055	0.2741	0.0084	0.0074	4	0.78	1%	0
261.15	Acid Soluble Manganese , AA, 965.09, test por... (0.2%)	0105	0.2649	0.0190				1			0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0035	0.2450	0.0020	0.2654	0.0140	0.0055	12	-1.46	4%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0433	0.2474	0.0046	0.2654	0.0140	0.0055	12	-1.29	3%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0157	0.2585	0.0130	0.2654	0.0140	0.0055	12	-0.49	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0377	0.2605	0.0070	0.2654	0.0140	0.0055	12	-0.35	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0096	0.2637	0.0008	0.2654	0.0140	0.0055	12	-0.12	0%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0090	0.2645	0.0150	0.2654	0.0140	0.0055	12	-0.07	0%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0354	0.2645	0.0030	0.2654	0.0140	0.0055	12	-0.07	0%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0368	0.2667	0.0003	0.2654	0.0140	0.0055	12	0.09	0%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0452	0.2700	0.0000	0.2654	0.0140	0.0055	12	0.33	1%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0472	0.2750	0.0100	0.2654	0.0140	0.0055	12	0.69	2%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0102	0.2828	0.0008	0.2654	0.0140	0.0055	12	1.24	3%	0
261.30	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0420	0.4371	0.0092	0.2654	0.0140	0.0055	12	12.27	32%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0234	0.2500	0.0000	0.2711	0.0194	0.0054	5	-1.09	4%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0324	0.2615	0.0070	0.2711	0.0194	0.0054	5	-0.50	2%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0360	0.2640	0.0000	0.2711	0.0194	0.0054	5	-0.37	1%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0511	0.2800	0.0000	0.2711	0.0194	0.0054	5	0.46	2%	0
261.31	Acid Soluble Manganese , ICP, test portion 97... (0.2%)	0482	0.3000	0.0200	0.2711	0.0194	0.0054	5	1.49	5%	0
261.32	Acid Soluble Manganese , ICP, test portion in... (0.2%)	0231	0.2450	0.0300	0.2628	0.0160	0.0109	3	-1.11	3%	0
261.32	Acid Soluble Manganese , ICP, test portion in... (0.2%)	0055	0.2674	0.0007	0.2628	0.0160	0.0109	3	0.29	1%	0
261.32	Acid Soluble Manganese , ICP, test portion in... (0.2%)	0483	0.2760	0.0020	0.2628	0.0160	0.0109	3	0.83	3%	0
261.34	Acid Soluble Manganese , ICP, test portion 20... (0.2%)	0521	0.3655	0.0000				1			0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.2%)	0117	0.2490	0.0085	0.2717	0.0201	0.0137	6	-1.01	4%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.2%)	0177	0.2631	0.0059	0.2717	0.0201	0.0137	6	-0.38	2%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.2%)	0037	0.2680	0.0100	0.2717	0.0201	0.0137	6	-0.16	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.2%)	0494	0.2693	0.0154	0.2717	0.0201	0.0137	6	-0.11	0%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.2%)	0515	0.2790	0.0421	0.2717	0.0201	0.0137	6	0.32	1%	0
261.35	Acid Soluble Manganese , ICP, test portion 20... (0.2%)	0421	0.3200	0.0000	0.2717	0.0201	0.0137	6	2.14	9%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0519	0.1900*	0.0000	0.2428	0.0256	0.0101	10	-1.92	11%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0506	0.2100*	0.0000	0.2428	0.0256	0.0101	10	-1.19	7%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
261.99	Acid Soluble Manganese , Other (0.2%)	0042	0.2300*	0.0000	0.2428	0.0256	0.0101	10	-0.47	3%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0523	0.2420	0.0020	0.2428	0.0256	0.0101	10	-0.03	0%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0027	0.2445	0.0470	0.2428	0.0256	0.0101	10	0.06	0%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0515	0.2456	0.0288	0.2428	0.0256	0.0101	10	0.10	1%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0524	0.2518	0.0016	0.2428	0.0256	0.0101	10	0.33	2%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0095	0.2600	0.0200	0.2428	0.0256	0.0101	10	0.62	4%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0389	0.2700	0.0020	0.2428	0.0256	0.0101	10	0.99	6%	0
261.99	Acid Soluble Manganese , Other (0.2%)	0481	0.2700	0.0000	0.2428	0.0256	0.0101	10	0.99	6%	0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0444	0.2450	0.0100				1			0
281.00	Acid Soluble Mercury , AA (ppm)	0511	0.0000	0.0000				0			4
281.30	Acid Soluble Mercury , ICP (ppm)	0519	0.0200	0.0000				1			0
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0000	0.0000				1			4
289.00	Acid Soluble Molybdenum , AA, test portion in... (30ppm)	0220	33.30	0.8000				1			0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0234	0.1000*	0.0000	34.76	4.114	0.5130	15	-8.42	50%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0511	23.50	0.0000	34.76	4.114	0.5130	15	-2.74	16%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0035	30.60	3.200	34.76	4.114	0.5130	15	-1.01	6%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0433	33.18	0.2367	34.76	4.114	0.5130	15	-0.38	2%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0027	33.41	0.2160	34.76	4.114	0.5130	15	-0.33	2%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0524	33.69	0.2120	34.76	4.114	0.5130	15	-0.26	2%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0520	34.01	0.0000	34.76	4.114	0.5130	15	-0.18	1%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0521	34.30	0.0000	34.76	4.114	0.5130	15	-0.11	1%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0096	36.30	0.6000	34.76	4.114	0.5130	15	0.37	2%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0102	36.36	0.1010	34.76	4.114	0.5130	15	0.39	2%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0389	36.60	0.6000	34.76	4.114	0.5130	15	0.45	3%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0368	37.50	1.000	34.76	4.114	0.5130	15	0.67	4%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0095	38.50	1.000	34.76	4.114	0.5130	15	0.91	5%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0452	38.85	0.0300	34.76	4.114	0.5130	15	0.99	6%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0377	76.05	0.5000	34.76	4.114	0.5130	15	10.04	59%	0
289.30	Acid Soluble Molybdenum , ICP (30ppm)	0444	35.69	7.320	34.76	4.114	0.5130	15	0.23	1%	1
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (30ppm)	0515	34.16	0.2990	35.84	1.572	0.6445	5	-1.07	2%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (30ppm)	0494	34.89	0.8137	35.84	1.572	0.6445	5	-0.60	1%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (30ppm)	0117	35.12	0.7400	35.84	1.572	0.6445	5	-0.46	1%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (30ppm)	0040	37.30	0.2000	35.84	1.572	0.6445	5	0.93	2%	0
289.33	Acid Soluble Molybdenum , ICP, 2006.03 modifi... (30ppm)	0037	37.72	1.170	35.84	1.572	0.6445	5	1.19	3%	0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (30ppm)	0515	31.66	5.652				2			0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010... (30ppm)	0230	35.85	0.5000				2			0
289.99	Acid Soluble Molybdenum , Other (30ppm)	0042	30.75	0.7000	36.94	10.12	0.5250	4	-0.61	8%	0
289.99	Acid Soluble Molybdenum , Other (30ppm)	0519	31.05	0.1000	36.94	10.12	0.5250	4	-0.58	8%	0
289.99	Acid Soluble Molybdenum , Other (30ppm)	0220	34.00	0.0000	36.94	10.12	0.5250	4	-0.29	4%	0
289.99	Acid Soluble Molybdenum , Other (30ppm)	0506	51.95	1.300	36.94	10.12	0.5250	4	1.48	20%	0
291.00	Acid Soluble Nickel , AA, test portion as in ... (ppm)	0136	1.000	0.0000				1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	0.9500	0.1600	1.160	0.1588	0.0661	9	-1.22	9%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0524	0.9540	0.0140	1.160	0.1588	0.0661	9	-1.20	9%	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Threshold %RSD	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
291.30	Acid Soluble Nickel , ICP (ppm)	0368	1.100	0.0000	1.160	0.1588	0.0661	9	-0.35	3%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0102	1.143	0.1110	1.160	0.1588	0.0661	9	-0.10	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0521	1.192	0.0000	1.160	0.1588	0.0661	9	0.19	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0519	1.195	0.0100	1.160	0.1588	0.0661	9	0.20	1%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0511	1.270	0.0000	1.160	0.1588	0.0661	9	0.64	5%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0452	1.300	0.0800	1.160	0.1588	0.0661	9	0.81	6%	0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	1.340	0.2200	1.160	0.1588	0.0661	9	1.04	8%	0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w...	0515	0.9129	0.4142				2			0
291.33	Acid Soluble Nickel , ICP, 2006.03 modified w...	0494	1.165	0.3294				2			0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	0.6534	0.2072				1			0
291.99	Acid Soluble Nickel , Other (ppm)	0220	3.750	0.5000				1			0
301.30	Acid Soluble Selenium , ICP (ppm)	0519	0.0100	0.0000				2			0
301.30	Acid Soluble Selenium , ICP (ppm)	0524	1.610	0.0400				2			0
301.30	Acid Soluble Selenium , ICP (ppm)	0511	0.0000	0.0000				2			4
301.33	Acid Soluble Selenium , ICP, 2006.03 modified...	0515	0.9434	0.0207				2			0
301.33	Acid Soluble Selenium , ICP, 2006.03 modified...	0494	1.064	0.2978				2			0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppm)	0515	0.8536	1.059				1			0
311.32	Sodium, ICP, 2006.03 test portion (%)	0521	1.196	0.0000				1			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0035	0.7560	0.0480				2			0
311.33	Sodium, ICP, 2006.03 modified w/9:3 HNO3:HCl ... (%)	0102	0.8023	0.0663				2			0
311.99	Sodium, Other (%)	0354	0.7690	0.0240	0.8741	0.0733	0.0214	4	-1.43	6%	0
311.99	Sodium, Other (%)	0494	0.8825	0.0114	0.8741	0.0733	0.0214	4	0.11	0%	0
311.99	Sodium, Other (%)	0096	0.9100	0.0000	0.8741	0.0733	0.0214	4	0.49	2%	0
311.99	Sodium, Other (%)	0482	0.9350	0.0500	0.8741	0.0733	0.0214	4	0.83	3%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.03%)	0457	0.04850*	0.0002	0.0594	0.0064	0.0001	5	-1.50	9%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.03%)	0481	0.0600	0.0000	0.0594	0.0064	0.0001	5	0.08	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.03%)	0428	0.0607	0.0003	0.0594	0.0064	0.0001	5	0.17	1%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.03%)	0029	0.0639	0.0001	0.0594	0.0064	0.0001	5	0.61	4%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.03%)	0040	0.0640	0.0000	0.0594	0.0064	0.0001	5	0.63	4%	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.03%)	0105	0.0649	0.0027	0.0594	0.0064	0.0001	5	0.75	5%	1
321.03	Acid Soluble Zinc , AA, 965.09, test portion ... (0.03%)	0105	0.0636	0.0015				1			0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0354	0.0565	0.0010	0.0657	0.0046	0.0021	22	-2.01	7%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0231	0.0600	0.0000	0.0657	0.0046	0.0021	22	-1.24	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0292	0.0600	0.0000	0.0657	0.0046	0.0021	22	-1.24	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0482	0.0600	0.0000	0.0657	0.0046	0.0021	22	-1.24	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0433	0.0623	0.0002	0.0657	0.0046	0.0021	22	-0.74	3%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0230	0.0638	0.0005	0.0657	0.0046	0.0021	22	-0.42	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0324	0.0640	0.0000	0.0657	0.0046	0.0021	22	-0.37	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0090	0.0645	0.0010	0.0657	0.0046	0.0021	22	-0.26	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0035	0.0647	0.0021	0.0657	0.0046	0.0021	22	-0.23	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0095	0.0650	0.0100	0.0657	0.0046	0.0021	22	-0.15	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0472	0.0650	0.0100	0.0657	0.0046	0.0021	22	-0.15	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0055	0.0659	0.0004	0.0657	0.0046	0.0021	22	0.04	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				
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0377	0.0660	0.0040	0.0657	0.0046	0.0021	22	0.07	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0096	0.0664	0.0005	0.0657	0.0046	0.0021	22	0.14	0%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0102	0.0674	0.0006	0.0657	0.0046	0.0021	22	0.37	1%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0368	0.0680	0.0036	0.0657	0.0046	0.0021	22	0.50	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0452	0.0680	0.0000	0.0657	0.0046	0.0021	22	0.50	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0511	0.0680	0.0000	0.0657	0.0046	0.0021	22	0.50	2%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0360	0.0705	0.0030	0.0657	0.0046	0.0021	22	1.05	4%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0444	0.0720	0.0020	0.0657	0.0046	0.0021	22	1.38	5%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0420	0.0780	0.0028	0.0657	0.0046	0.0021	22	2.68	9%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0483	0.0841	0.0044	0.0657	0.0046	0.0021	22	4.02	14%	0
321.30	Acid Soluble Zinc , ICP, test portion inorgan... (0.03%)	0234	0.04000*	0.0400	0.0657	0.0046	0.0021	22	-5.61	20%	1
321.32	Acid Soluble Zinc , ICP, test portion 2006.03... (0.03%)	0521	0.0935	0.0000				1			0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (0.03%)	0220	0.0585	0.0010	0.0655	0.0085	0.0009	5	-0.71	5%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (0.03%)	0494	0.0613	0.0004	0.0655	0.0085	0.0009	5	-0.43	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (0.03%)	0117	0.0617	0.0013	0.0655	0.0085	0.0009	5	-0.39	3%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (0.03%)	0037	0.0660	0.0020	0.0655	0.0085	0.0009	5	0.05	0%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (0.03%)	0421	0.0800	0.0000	0.0655	0.0085	0.0009	5	1.48	11%	0
321.33	Acid Soluble Zinc , ICP, test portion 2006.03... (0.03%)	0515	0.1170	0.0288	0.0655	0.0085	0.0009	5	5.26	39%	1
321.99	Acid Soluble Zinc , Other (0.03%)	0042	0.03050*	0.0010	0.0531	0.0155	0.0006	7	-1.32	21%	0
321.99	Acid Soluble Zinc , Other (0.03%)	0519	0.04000*	0.0000	0.0531	0.0155	0.0006	7	-0.76	12%	0
321.99	Acid Soluble Zinc , Other (0.03%)	0027	0.04950*	0.0010	0.0531	0.0155	0.0006	7	-0.21	3%	0
321.99	Acid Soluble Zinc , Other (0.03%)	0523	0.0595	0.0010	0.0531	0.0155	0.0006	7	0.37	6%	0
321.99	Acid Soluble Zinc , Other (0.03%)	0506	0.0600	0.0000	0.0531	0.0155	0.0006	7	0.40	7%	0
321.99	Acid Soluble Zinc , Other (0.03%)	0524	0.0657	0.0005	0.0531	0.0155	0.0006	7	0.73	12%	0
321.99	Acid Soluble Zinc , Other (0.03%)	0389	0.0665	0.0010	0.0531	0.0155	0.0006	7	0.78	13%	0
321.99	Acid Soluble Zinc , Other (0.03%)	0515	0.1616	0.0055	0.0531	0.0155	0.0006	7	6.33	102%	1
325.30	Water Soluble Zinc , ICP (%)	0444	0.0670	0.0020				1			0

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