

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Methods: 136

Sample # 180911

Statistical Summary

Labs Reporting: 85

3-1-3 Organic

Issue Date : 10/31/2018

Method Code	Analyte & Method Sample # 180911	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Method Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Method IA Ratio	Average Range (R-bar)	Hornitz %RSD
001.99	Ammoniacal Nitrogen, Other (%)	3	3	0.3622	0.2188	0.3622		0.2188	0.1579	60.40%		0.0137	4.66%
002.99	Nitrate Nitrogen, Other (%)	1		0.3005									
003.10	Water Insoluble Nitrogen, Method I (%)	1		0.1700									
005.99	Urea Nitrogen, Other (%)	1		3.150									
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	1		3.000									
010.11	Total Nitrogen, Modified Comprehensive (3%)	6	6	3.849	0.2591	3.849	0.4900	0.2938	0.1499	7.63%	1.40	0.0636	3.27%
010.12	Total Nitrogen, Salicylic (3%)	1		3.810									
010.60	Total Nitrogen, Combustion (3%)	55	53	3.870	0.2084	3.851	0.4900	0.1472	0.0253	3.82%	0.70	0.0512	3.27%
010.99	Total Nitrogen, Other (3%)	10	10	3.437	0.2702	3.437	0.4900	0.3064	0.1211	8.91%	1.46	0.0679	3.32%
020.10	Total Phosphorus as P2O5, Gravimetric Quinolinium ..	5	5	2.641	0.1120	2.641		0.1120	0.0626	4.24%		0.0260	3.46%
020.20	Total Phosphorus as P2O5, Spectrophotometric Molyb	15	14	2.786	0.1999	2.786		0.2267	0.0757	8.14%		0.0934	3.43%
020.40	Total Phosphorus as P2O5, Automated (%)	2	2	3.088	0.2227								
020.50	Total Phosphorus as P2O5, ICP (%)	22	21	2.772	0.3989	2.827		0.2260	0.0616	7.99%		0.0566	3.42%
020.99	Total Phosphorus as P2O5, Other (%)	2	2	2.325	0.5161								
040.20	Indirect Available Phosphorus as P2O5, Spectrophot...	1		2.920									
041.10	Direct Available Phosphorus as P2O5, Gravimetric Q..	4	4	2.441	0.4170	2.441	0.6700	0.4170	0.2606	17.08%	1.45	0.0931	3.50%
041.11	Direct Available Phosphorus as P2O5, Gravimetric Q..	5	5	2.735	0.0744	2.735	0.6700	0.0744	0.0416	2.72%	0.26	0.0406	3.44%
041.20	Direct Available Phosphorus as P2O5, Spectrophotom	1		3.075									
041.21	Direct Available Phosphorus as P2O5, Spectrophotom	3	3	2.742	0.1025	2.742	0.6700	0.1025	0.0740	3.74%	0.36	0.0233	3.44%
041.50	Direct Available Phosphorus as P2O5, ICP (1%)	3	3	2.757	0.0929	2.757	0.6700	0.0929	0.0671	3.37%	0.32	0.0333	3.43%
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-...	9	8	2.750	0.1070	2.751	0.6700	0.1194	0.0528	4.34%	0.42	0.0735	3.43%
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA ..	9	9	2.910	0.3080	2.910	0.6700	0.3493	0.1456	12.00%	1.21	0.0530	3.41%
041.99	Direct Available Phosphorus as P2O5, Other (1%)	5	5	1.937	0.7395	1.937	0.6700	0.7395	0.4134	38.18%	2.57	0.1300	3.62%
042.10	Water Soluble OrthoP as P2O5, Spectrophotometric (%)	1		3.362									
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	2	2	2.878	0.0467								
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	13	12	3.497	0.5715	3.496	0.4100	0.6451	0.2328	18.45%	3.67	0.1175	3.31%
050.30	Soluble Potassium as K2O, AA (Oxalate) (3%)	4	4	3.680	0.3178	3.680	0.4100	0.3178	0.1986	8.64%	1.81	0.1600	3.29%
050.31	Soluble Potassium as K2O, AA (Citrate) (3%)	1		3.750									
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (3%)	1		3.875									
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	8	8	3.844	0.3624	3.864	0.4100	0.3656	0.1616	9.46%	2.08	0.1139	3.26%
050.51	Soluble Potassium as K2O, ICP (Citrate) (3%)	6	6	3.897	0.3270	3.897	0.4100	0.3708	0.1892	9.52%	2.11	0.0700	3.26%

Method Code	Analyte & Method Sample # 180911	# Tests Submitted	# Tests in Robust Calculations	Raw Mean	Raw SD	Assigned Value Robust Mean	IA at Method Value	Robust sd	Robust Uncertainty (U)	Robust % RSD	Method IA Ratio	Average Range (R-bar)	Howitz %RSD
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	11	10	3.783	0.1558	3.784	0.4100	0.1755	0.0694	4.64%	1.00	0.0538	3.27%
050.60	Soluble Potassium as K2O, Flame Photometric (Oxala	2	2	3.394	0.5253								
050.61	Soluble Potassium as K2O, Flame Photometric (Citra..	1		4.250									
050.62	Soluble Potassium as K2O, Flame Photometric (Citra..	4	4	3.853	0.1771	3.853	0.4100	0.1771	0.1107	4.60%	1.01	0.0820	3.26%
050.99	Soluble Potassium as K2O, Other (3%)	28	28	3.724	0.3133	3.724	0.4100	0.3267	0.0772	8.77%	1.86	0.1017	3.28%
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (1%)	1		2.095									
101.30	Acid Soluble Calcium, ICP, test portion inorganic ... (1	15	14	1.376	0.1591	1.338	0.2669	0.0505	0.0169	3.77%	0.44	0.0459	3.83%
101.31	Acid Soluble Calcium, ICP, test portion organic 96...	1	1	1.310									
101.32	Acid Soluble Calcium, ICP, test portion 2006.03A-C...	1		1.436									
101.33	Acid Soluble Calcium, ICP, 2017.02 (1%)	7	7	1.335	0.0787	1.335	0.2667	0.0892	0.0422	6.69%	0.78	0.0293	3.83%
101.99	Acid Soluble Calcium, Other (1%)	6	6	1.325	0.1134	1.295	0.2648	0.0529	0.0270	4.09%	0.47	0.0437	3.85%
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 (0.5%)	3	2	0.7288	0.1043	0.7288	0.2364	0.1043	0.0922	14.31%	1.03	0.0485	4.19%
121.01	Acid Soluble Magnesium, AA, organic 965.09 (0.5%)	1		0.1400									
121.30	Acid Soluble Magnesium, ICP, test portion inorgani... (	16	15	0.6685	0.0744	0.6624	0.2331	0.0685	0.0221	10.33%	0.68	0.0141	4.26%
121.32	Acid Soluble Magnesium, ICP, test portion 2006.03A...	1		0.6450									
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	9	9	0.6722	0.1117	0.6421	0.2321	0.0336	0.0140	5.24%	0.34	0.0113	4.28%
121.99	Acid Soluble Magnesium, Other (0.5%)	9	9	0.6803	0.1055	0.6591	0.2330	0.0603	0.0251	9.15%	0.60	0.0179	4.26%
131.00	Water Soluble Magnesium, AA (%)	3	3	0.6848	0.1153	0.6848		0.1153	0.0832	16.84%		0.0426	4.23%
131.30	Water Soluble Magnesium, ICP (%)	3	3	0.6313	0.0037	0.6313		0.0037	0.0027	0.58%		0.0093	4.29%
143.99	Elemental Sulfur, Other (%)	3	3	2.756	0.3716	2.756		0.3716	0.2682	13.48%		0.1133	3.43%
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulfur - ... (%)	2	2	2.288	0.1874								
145.99	Sulfate Sulfur, HCl soluble, Other (%)	1		2.430									
148.00	Total Sulfur, Combustion (2.5%)	5	5	2.513	0.2996	2.513	0.3256	0.2996	0.1675	11.92%	2.14	0.2322	3.48%
148.01	Total Sulfur, Gravimetric - sulfate and elemental... (2.5	7	7	2.156	0.4326	2.156	0.3078	0.4905	0.2318	22.75%	3.71	0.0439	3.56%
148.07	Total Sulfur, ICP, test portion as in 2017.02 (2.5%)	11	10	2.582	0.2016	2.572	0.3286	0.1947	0.0770	7.57%	1.38	0.0335	3.47%
148.99	Total Sulfur, Other (2.5%)	9	9	2.512	0.3722	2.554	0.3277	0.3150	0.1313	12.33%	2.24	0.0338	3.47%
149.04	Sulfur - HNO3 soluble, ICP (%)	3	3	2.672	0.1032	2.672		0.1032	0.0745	3.86%		0.0228	3.45%
151.00	Acid Soluble Arsenic , AA, test portion 2006.03 m... (p	2	2	0.2688	0.2139								
151.30	Acid Soluble Arsenic , ICP (ppm)	1		0.7155									
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	2	2	1.478	0.2726								
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	2	2	2.144	0.3750								
151.99	Acid Soluble Arsenic , Other (ppm)	2	2	1.274	1.027								
165.00	Acid Soluble Boron , Spectrophotometric (0.01%)	3	3	0.0273	0.0038	0.0273	0.0071	0.0038	0.0028	14.08%	1.26	0.0007	6.88%
165.30	Acid Soluble Boron , ICP, test portion in 982.01 ... (0.0	8	8	0.0225	0.0019	0.0225	0.0064	0.0022	0.0010	9.65%	0.79	0.0007	7.08%
165.99	Acid Soluble Boron , Other (0.01%)	14	13	0.0385	0.0502	0.0253	0.0068	0.0052	0.0018	20.69%	1.80	0.0202	6.96%
171.10	Water Soluble Boron , Spectrophotometric (%)	2	2	0.0272	0.0085								
171.99	Water Soluble Boron , Other (%)	3	3	0.0227	0.0005	0.0227		0.0005	0.0004	2.29%		0.0015	7.07%
181.30	Acid Soluble Cadmium , ICP (ppm)	3	3	0.0384	0.0318	0.0384		0.0318	0.0229	82.77%		0.0009	26.13%
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	2	2	0.4209	0.4962								
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppn	2	1	0.8117									
181.99	Acid Soluble Cadmium , Other (ppm)	1		0.0650									
190.00	Water Soluble Chlorine, Titrimetric (%)	1		46.93									

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191.00	Acid Soluble Chromium , AA, test portion 2006.03 ... (1		1.345									
191.30	Acid Soluble Chromium , ICP (ppm)	4	4	3.439	2.144	3.439		2.144	1.340	62.36%		0.2775	13.28%
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	4	4	3.210	2.719	3.210		2.719	1.699	84.69%		0.4629	13.42%
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C (ppm)	2	2	2.864	1.874								
191.99	Acid Soluble Chromium , Other (ppm)	2	2	2.115	0.8268								
202.30	Acid Soluble Cobalt , ICP (ppm)	2	2	0.8609	0.1569								
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	4	4	1.108	0.3343	1.108	1.3325	0.3343	0.2089	30.16%	0.58	0.1750	15.75%
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	2	2	1.698	1.327								
202.99	Acid Soluble Cobalt , Other (ppm)	3	3	0.9081	0.1693	0.9081	1.2724	0.1693	0.1222	18.64%	0.31	0.0181	16.23%
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	2	1	0.0011									
221.30	Acid Soluble Copper , ICP, test portion inorganic... (%)	7	7	0.0090	0.0100	0.0071	0.0057	0.0065	0.0031	91.82%	2.66	0.0085	8.42%
221.32	Acid Soluble Copper , ICP, test portion 2006.03A-... (%)	1		69.85									
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	4	4	0.0024	0.0006	0.0024	0.0052	0.0006	0.0004	24.98%	0.27	0.0002	9.89%
221.99	Acid Soluble Copper , Other (%)	7	6	0.0025	0.0007	0.0024	0.0052	0.0003	0.0001	11.27%	0.12	0.0003	9.95%
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.05%)	5	5	0.1349	0.0514	0.1349	0.0185	0.0514	0.0287	38.08%	6.47	0.0161	5.41%
241.30	Acid Soluble Iron , ICP, test portion inorganic 96... (0.0	16	15	0.0935	0.0093	0.0927	0.0143	0.0084	0.0027	9.09%	1.38	0.0049	5.72%
241.32	Acid Soluble Iron , ICP, test portion 2006.03A-C ... (0.	1		929.0									
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	8	8	0.0945	0.0183	0.0894	0.0139	0.0057	0.0025	6.41%	0.96	0.0043	5.75%
241.99	Acid Soluble Iron , Other (0.05%)	7	7	0.0970	0.0208	0.0909	0.0141	0.0064	0.0030	7.01%	1.05	0.0028	5.74%
251.00	Acid Soluble Lead , AA, test portion 2006.03 modi... (p	1		0.7960									
251.30	Acid Soluble Lead , ICP (ppm)	4	4	0.4522	0.7033	0.4522		0.7033	0.4396	155.54%		0.1311	18.03%
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	2	1	0.0600									
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	2	1	1.071									
251.99	Acid Soluble Lead , Other (ppm)	1		0.1405									
261.12	Acid Soluble Manganese , AA, inorganic 965.09 (0.03	4	4	0.0303	0.0036	0.0303	0.0080	0.0036	0.0023	12.00%	1.05	0.0057	6.77%
261.30	Acid Soluble Manganese , ICP, test portion 972.02... (	9	9	0.0444	0.0032	0.0444	0.0094	0.0036	0.0015	8.16%	0.89	0.0016	6.39%
261.31	Acid Soluble Manganese , ICP, test portion 972.02... (	3	3	0.0447	0.0050	0.0447	0.0095	0.0050	0.0036	11.27%	1.24	0.0000	6.39%
261.32	Acid Soluble Manganese , ICP, test portion inorga... (f	3	3	0.0567	0.0161	0.0567	0.0107	0.0161	0.0116	28.41%	3.52	0.0195	6.16%
261.33	Acid Soluble Manganese , ICP, test portion organi... (f	1		0.0500									
261.34	Acid Soluble Manganese , ICP, test portion 2006.0... (	1		490.9									
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	8	7	0.0438	0.0023	0.0438	0.0094	0.0026	0.0012	6.03%	0.66	0.0008	6.41%
261.99	Acid Soluble Manganese , Other (0.03%)	8	7	0.0445	0.0035	0.0445	0.0094	0.0040	0.0019	8.96%	0.98	0.0008	6.39%
271.00	Water Soluble Manganese , AA (%)	3	3	0.0405	0.0045	0.0405		0.0045	0.0032	11.01%		0.0077	6.48%
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	2	2	0.0441	0.0034								
271.99	Water Soluble Manganese , Other (%)	1		0.0445									
281.00	Acid Soluble Mercury , AA (ppm)	1		0.8965									
281.30	Acid Soluble Mercury , ICP (ppm)	2	1	0.0550									
281.99	Acid Soluble Mercury , Other (ppm)	2	2	0.0749	0.0684								
289.30	Acid Soluble Molybdenum , ICP (ppm)	3	3	0.4535	0.6915	0.4535	1.1361	0.6915	0.4991	152.48%	1.42	0.7104	18.02%
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	3	3	0.2451	0.1498	0.2451	1.0735	0.1498	0.1081	61.11%	0.33	0.1179	19.77%
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/6010C (p	2	2	2.450	1.103								
289.99	Acid Soluble Molybdenum , Other (ppm)	2	2	0.2525	0.1379								

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291.00	Acid Soluble Nickel , AA, test portion 2006.03 mo... (p	1		7.669									
291.30	Acid Soluble Nickel , ICP (ppm)	4	4	1.805	1.304	1.805		1.304	0.8152	72.25%		0.2254	14.64%
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	3	3	1.532	0.6253	1.532		0.6253	0.4513	40.82%		0.5010	15.00%
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	2	2	2.246	0.3306								
291.99	Acid Soluble Nickel , Other (ppm)	3	3	2.138	1.615	2.138		1.615	1.166	75.54%		0.2838	14.27%
301.30	Acid Soluble Selenium , ICP (ppm)	1		0.6075									
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	2	1	1.915									
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C (ppr	2	1	3.353									
301.99	Acid Soluble Selenium , Other (ppm)	3	3	0.2582	0.1371	0.2582		0.1371	0.0990	53.11%		0.0882	19.61%
311.00	Sodium, AA (0.5%)	1		1.207									
311.30	Sodium, Flame Photometric (0.5%)	1		1.113									
311.32	Sodium, ICP, 2006.03 test portion (0.5%)	2	2	1.023	0.0318								
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	10	9	1.026	0.0552	1.018	0.1068	0.0395	0.0165	3.89%	0.86	0.0133	3.99%
311.99	Sodium, Other (0.5%)	8	8	1.062	0.0653	1.062	0.1112	0.0740	0.0327	6.97%	1.55	0.0173	3.96%
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.01%)	5	4	0.0256	0.0025	0.0256	0.0076	0.0025	0.0016	9.76%	0.77	0.0022	6.94%
321.30	Acid Soluble Zinc , ICP, test portion inorganic 9... (0.0	17	16	0.0287	0.0033	0.0283	0.0078	0.0026	0.0008	9.13%	0.77	0.0018	6.84%
321.32	Acid Soluble Zinc , ICP, test portion 2006.03A-C ... (0.	1		479.0									
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	8	8	0.0296	0.0066	0.0279	0.0078	0.0023	0.0010	8.31%	0.69	0.0012	6.86%
321.99	Acid Soluble Zinc , Other (0.01%)	9	8	0.0293	0.0071	0.0277	0.0078	0.0038	0.0017	13.71%	1.14	0.0005	6.86%
325.00	Water Soluble Zinc , AA (%)	3	3	0.0273	0.0027	0.0273		0.0027	0.0020	9.98%		0.0004	6.88%
325.30	Water Soluble Zinc , ICP (%)	3	3	0.0267	0.0012	0.0267		0.0012	0.0008	4.39%		0.0001	6.90%

The Method IA Ratio = 2.33 * Robust SD / IA at the Method Assigned Value. IA ratios of 1 and less indicate participant data dispersion is as good or less than the IA. Red indicates the IA ratio is significantly greater than 1, Orange indicates marginally greater than 1, Green indicates IA ratio is not significantly greater than 1 and Grey indicates < 6 labs reporting.

magruder fertilizer

check sample program



STRIVING FOR EXCELLENCE IN ANALYSIS

Method Proficiency For All Labs (Lab Values)

Sample # 180911

Method Precision Report

3-1-3 Organic

Issue Date : 10/31/2018

Method Code	Analyte & Method	# Tests Submitted	# Tests Used in Precision Calcs	Mean	SD	Between Labs sL	Within Labs sr	Reproducibility SR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
010.60	Total Nitrogen, Combustion (3%)	55	50	3.854	0.1525	0.1490	0.0463	0.1560	3.86%	1.20%	4.05%	3.370
010.99	Total Nitrogen, Other (3%)	10	10	3.437	0.2702	0.2673	0.0559	0.2730	7.78%	1.63%	7.94%	4.886
020.20	Total Phosphorus as P2O5, Spectrophotometric MolybdovanadoP (%)	15	14	2.786	0.1999	0.1891	0.0916	0.2101	6.79%	3.29%	7.54%	2.294
020.50	Total Phosphorus as P2O5, ICP (%)	22	19	2.861	0.1928	0.1895	0.0508	0.1962	6.62%	1.78%	6.86%	3.860
041.51	Direct Available Phosphorus as P2O5, ICP, Citrate-EDTA Ext. (1%)	9	8	2.750	0.1070	0.0981	0.0606	0.1153	3.57%	2.20%	4.19%	1.902
041.60	Direct Available Phosphorus as P2O5, Citrate-EDTA Ext. (1%)	9	9	2.910	0.3080	0.3065	0.0441	0.3096	10.53%	1.52%	10.64%	7.021
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	13	12	3.497	0.5715	0.5662	0.1092	0.5767	16.19%	3.12%	16.49%	5.282
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	8	8	3.844	0.3624	0.3550	0.1031	0.3696	9.23%	2.68%	9.61%	3.585
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	11	10	3.783	0.1558	0.1511	0.0537	0.1604	3.99%	1.42%	4.24%	2.987
050.99	Soluble Potassium as K2O, Other (3%)	28	27	3.724	0.3193	0.3131	0.0880	0.3253	8.41%	2.36%	8.73%	3.694
101.30	Acid Soluble Calcium, ICP, test portion inorganic 965.09 (1%)	15	12	1.350	0.1249	0.1225	0.0343	0.1273	9.07%	2.54%	9.42%	3.708
121.30	Acid Soluble Magnesium, ICP, test portion inorganic 965.09 (0.5%)	16	13	0.6567	0.0572	0.0568	0.0102	0.0577	8.64%	1.55%	8.78%	5.675
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	9	8	0.6358	0.0244	0.0237	0.0084	0.0251	3.72%	1.33%	3.95%	2.977
121.99	Acid Soluble Magnesium, Other (0.5%)	9	8	0.6478	0.0438	0.0418	0.0184	0.0457	6.45%	2.84%	7.05%	2.479
148.07	Total Sulfur, ICP, test portion as in 2017.02 (2.5%)	11	9	2.570	0.2098	0.2094	0.0175	0.2101	8.15%	0.68%	8.18%	11.98
148.99	Total Sulfur, Other (2.5%)	9	8	2.614	0.2287	0.2277	0.0302	0.2297	8.71%	1.16%	8.79%	7.607
165.30	Acid Soluble Boron , ICP, test portion in 982.01 (0.01%)	8	8	0.0225	0.0019	0.0019	0.0007	0.0020	8.31%	3.14%	8.88%	2.829
165.99	Acid Soluble Boron , Other (0.01%)	14	12	0.0247	0.0041	0.0040	0.0016	0.0043	16.16%	6.60%	17.45%	2.646
241.30	Acid Soluble Iron , ICP, test portion inorganic 965.09 (0.05%)	16	14	0.0918	0.0068	0.0063	0.0038	0.0073	6.82%	4.15%	7.98%	1.921
261.30	Acid Soluble Manganese , ICP, test portion 972.02a (0.03%)	9	8	0.0450	0.0030	0.0029	0.0010	0.0030	6.35%	2.33%	6.76%	2.905
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	10	8	1.010	0.0287	0.0277	0.0105	0.0297	2.74%	1.04%	2.94%	2.817
311.99	Sodium, Other (0.5%)	8	8	1.062	0.0653	0.0642	0.0167	0.0663	6.04%	1.57%	6.24%	3.974
321.30	Acid Soluble Zinc , ICP, test portion inorganic 965.09 (0.01%)	17	14	0.0283	0.0022	0.0021	0.0008	0.0023	7.47%	2.87%	8.01%	2.792

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: 136

Sample # 180911

Lab Values

Labs Reporting: 85

3-1-3 Organic

Issue Date : 10/31/2018

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
001.99	Ammoniacal Nitrogen, Other (%)	0524	0.1676	0.0095	0.3622	0.2188	0.0137	3	-0.89		0
001.99	Ammoniacal Nitrogen, Other (%)	0553	0.3201	0.0038	0.3622	0.2188	0.0137	3	-0.19		0
001.99	Ammoniacal Nitrogen, Other (%)	0510	0.5990	0.0279	0.3622	0.2188	0.0137	3	1.08		0
002.99	Nitrate Nitrogen, Other (%)	0553	0.3005	0.0270				1			0
003.10	Water Insoluble Nitrogen, Method I (%)	0220	0.1700	0.0200				1			0
005.99	Urea Nitrogen, Other (%)	0027	3.150	0.0000				1			0
009.99	Ammoniacal Plus Nitrate Nitrogen, Other (%)	0518	3.000	0.2400				1			0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0309	3.505	0.0700	3.849	0.2938	0.0636	6	-1.04	OK	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0510	3.673	0.0813	3.849	0.2938	0.0636	6	-0.53	OK	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0105	3.815	0.0100	3.849	0.2938	0.0636	6	-0.10	OK	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0220	3.845	0.0100	3.849	0.2938	0.0636	6	-0.01	OK	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0544	4.005	0.1300	3.849	0.2938	0.0636	6	0.47	OK	0
010.11	Total Nitrogen, Modified Comprehensive (3%)	0546	4.250	0.0800	3.849	0.2938	0.0636	6	1.22	OK	0
010.12	Total Nitrogen, Salicylic (3%)	0416	3.810	0.0000				1			0
010.60	Total Nitrogen, Combustion (3%)	0405	3.470	0.0800	3.851	0.1472	0.0512	53	-2.59	OK	0
010.60	Total Nitrogen, Combustion (3%)	0485	3.555	0.2380	3.851	0.1472	0.0512	53	-2.01	OK	0
010.60	Total Nitrogen, Combustion (3%)	0444	3.625	0.1900	3.851	0.1472	0.0512	53	-1.54	OK	0
010.60	Total Nitrogen, Combustion (3%)	0095	3.650	0.0000	3.851	0.1472	0.0512	53	-1.37	OK	0
010.60	Total Nitrogen, Combustion (3%)	0035	3.665	0.0100	3.851	0.1472	0.0512	53	-1.27	OK	0
010.60	Total Nitrogen, Combustion (3%)	0291	3.675	0.0100	3.851	0.1472	0.0512	53	-1.20	OK	0
010.60	Total Nitrogen, Combustion (3%)	0527	3.675	0.0300	3.851	0.1472	0.0512	53	-1.20	OK	0
010.60	Total Nitrogen, Combustion (3%)	0368	3.684	0.0160	3.851	0.1472	0.0512	53	-1.14	OK	0
010.60	Total Nitrogen, Combustion (3%)	0423	3.685	0.0100	3.851	0.1472	0.0512	53	-1.13	OK	0
010.60	Total Nitrogen, Combustion (3%)	0389	3.690	0.0000	3.851	0.1472	0.0512	53	-1.10	OK	0
010.60	Total Nitrogen, Combustion (3%)	0483	3.710	0.0200	3.851	0.1472	0.0512	53	-0.96	OK	0
010.60	Total Nitrogen, Combustion (3%)	0452	3.745	0.0100	3.851	0.1472	0.0512	53	-0.72	OK	0
010.60	Total Nitrogen, Combustion (3%)	0073	3.750	0.0400	3.851	0.1472	0.0512	53	-0.69	OK	0
010.60	Total Nitrogen, Combustion (3%)	0292	3.775	0.0100	3.851	0.1472	0.0512	53	-0.52	OK	0
010.60	Total Nitrogen, Combustion (3%)	0136	3.780	0.0000	3.851	0.1472	0.0512	53	-0.49	OK	0
010.60	Total Nitrogen, Combustion (3%)	0451	3.792	0.0350	3.851	0.1472	0.0512	53	-0.41	OK	0
010.60	Total Nitrogen, Combustion (3%)	0234	3.800	0.0000	3.851	0.1472	0.0512	53	-0.35	OK	0
010.60	Total Nitrogen, Combustion (3%)	0523	3.800	0.0000	3.851	0.1472	0.0512	53	-0.35	OK	0
010.60	Total Nitrogen, Combustion (3%)	0422	3.810	0.0200	3.851	0.1472	0.0512	53	-0.28	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.60	Total Nitrogen, Combustion (3%)	0354	3.815	0.0500	3.851	0.1472	0.0512	53	-0.25	OK	0
010.60	Total Nitrogen, Combustion (3%)	0494	3.815	0.0500	3.851	0.1472	0.0512	53	-0.25	OK	0
010.60	Total Nitrogen, Combustion (3%)	0501	3.830	0.0600	3.851	0.1472	0.0512	53	-0.15	OK	0
010.60	Total Nitrogen, Combustion (3%)	0482	3.835	0.1700	3.851	0.1472	0.0512	53	-0.11	OK	0
010.60	Total Nitrogen, Combustion (3%)	0023	3.839	0.0660	3.851	0.1472	0.0512	53	-0.08	OK	0
010.60	Total Nitrogen, Combustion (3%)	0547	3.840	0.0200	3.851	0.1472	0.0512	53	-0.08	OK	0
010.60	Total Nitrogen, Combustion (3%)	0042	3.850	0.1000	3.851	0.1472	0.0512	53	-0.01	OK	0
010.60	Total Nitrogen, Combustion (3%)	0043	3.850	0.0200	3.851	0.1472	0.0512	53	-0.01	OK	0
010.60	Total Nitrogen, Combustion (3%)	0486	3.850	0.0400	3.851	0.1472	0.0512	53	-0.01	OK	0
010.60	Total Nitrogen, Combustion (3%)	0324	3.855	0.0500	3.851	0.1472	0.0512	53	0.02	OK	0
010.60	Total Nitrogen, Combustion (3%)	0472	3.862	0.0270	3.851	0.1472	0.0512	53	0.07	OK	0
010.60	Total Nitrogen, Combustion (3%)	0377	3.867	0.0430	3.851	0.1472	0.0512	53	0.10	OK	0
010.60	Total Nitrogen, Combustion (3%)	0049	3.875	0.0900	3.851	0.1472	0.0512	53	0.16	OK	0
010.60	Total Nitrogen, Combustion (3%)	0106	3.875	0.0100	3.851	0.1472	0.0512	53	0.16	OK	0
010.60	Total Nitrogen, Combustion (3%)	0177	3.878	0.0010	3.851	0.1472	0.0512	53	0.18	OK	0
010.60	Total Nitrogen, Combustion (3%)	0102	3.888	0.0030	3.851	0.1472	0.0512	53	0.25	OK	0
010.60	Total Nitrogen, Combustion (3%)	0086	3.901	0.0295	3.851	0.1472	0.0512	53	0.34	OK	0
010.60	Total Nitrogen, Combustion (3%)	0070	3.903	0.0230	3.851	0.1472	0.0512	53	0.35	OK	0
010.60	Total Nitrogen, Combustion (3%)	0550	3.930	0.0000	3.851	0.1472	0.0512	53	0.53	OK	0
010.60	Total Nitrogen, Combustion (3%)	0105	3.935	0.0900	3.851	0.1472	0.0512	53	0.57	OK	0
010.60	Total Nitrogen, Combustion (3%)	0255	3.938	0.0920	3.851	0.1472	0.0512	53	0.59	OK	0
010.60	Total Nitrogen, Combustion (3%)	0356	3.955	0.1300	3.851	0.1472	0.0512	53	0.70	OK	0
010.60	Total Nitrogen, Combustion (3%)	0231	3.970	0.0000	3.851	0.1472	0.0512	53	0.81	OK	0
010.60	Total Nitrogen, Combustion (3%)	0117	3.975	0.0100	3.851	0.1472	0.0512	53	0.84	OK	0
010.60	Total Nitrogen, Combustion (3%)	0034	3.988	0.0610	3.851	0.1472	0.0512	53	0.92	OK	0
010.60	Total Nitrogen, Combustion (3%)	0185	4.000	0.1000	3.851	0.1472	0.0512	53	1.01	OK	0
010.60	Total Nitrogen, Combustion (3%)	0325	4.000	0.2000	3.851	0.1472	0.0512	53	1.01	OK	0
010.60	Total Nitrogen, Combustion (3%)	0230	4.025	0.0500	3.851	0.1472	0.0512	53	1.18	OK	0
010.60	Total Nitrogen, Combustion (3%)	0025	4.046	0.0080	3.851	0.1472	0.0512	53	1.32	OK	0
010.60	Total Nitrogen, Combustion (3%)	0040	4.100	0.0000	3.851	0.1472	0.0512	53	1.69	OK	0
010.60	Total Nitrogen, Combustion (3%)	0542	4.111	0.1100	3.851	0.1472	0.0512	53	1.76	OK	0
010.60	Total Nitrogen, Combustion (3%)	0041	4.170	0.1600	3.851	0.1472	0.0512	53	2.16	OK	0
010.60	Total Nitrogen, Combustion (3%)	0007	4.350	0.1000	3.851	0.1472	0.0512	53	3.39	High	0
010.60	Total Nitrogen, Combustion (3%)	0360	4.865	0.0300	3.851	0.1472	0.0512	53	6.89	High	0
010.60	Total Nitrogen, Combustion (3%)	0114	3.885	0.3300	3.851	0.1472	0.0512	53	0.23	OK	1
010.60	Total Nitrogen, Combustion (3%)	0055	3.960	0.3000	3.851	0.1472	0.0512	53	0.74	OK	1
010.99	Total Nitrogen, Other (3%)	0532	3.030	0.1000	3.437	0.3064	0.0679	10	-1.24	OK	0
010.99	Total Nitrogen, Other (3%)	0545	3.175	0.0500	3.437	0.3064	0.0679	10	-0.80	OK	0
010.99	Total Nitrogen, Other (3%)	0493	3.200	0.1000	3.437	0.3064	0.0679	10	-0.72	OK	0
010.99	Total Nitrogen, Other (3%)	0524	3.222	0.1210	3.437	0.3064	0.0679	10	-0.65	OK	0
010.99	Total Nitrogen, Other (3%)	0481	3.450	0.1000	3.437	0.3064	0.0679	10	0.04	OK	0
010.99	Total Nitrogen, Other (3%)	0513	3.485	0.0300	3.437	0.3064	0.0679	10	0.14	OK	0
010.99	Total Nitrogen, Other (3%)	0476	3.581	0.0375	3.437	0.3064	0.0679	10	0.44	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
010.99	Total Nitrogen, Other (3%)	0553	3.685	0.1100	3.437	0.3064	0.0679	10	0.75	OK	0
010.99	Total Nitrogen, Other (3%)	0522	3.700	0.0000	3.437	0.3064	0.0679	10	0.80	OK	0
010.99	Total Nitrogen, Other (3%)	0544	3.845	0.0300	3.437	0.3064	0.0679	10	1.24	OK	0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0493	2.450	0.1000	2.641	0.1120	0.0260	5	-1.70		0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0049	2.650	0.0200	2.641	0.1120	0.0260	5	0.08		0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0095	2.660	0.0000	2.641	0.1120	0.0260	5	0.17		0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0494	2.720	0.0000	2.641	0.1120	0.0260	5	0.71		0
020.10	Total Phosphorus as P2O5, Gravimetric Quinoli... (%)	0136	2.725	0.0100	2.641	0.1120	0.0260	5	0.75		0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0476	2.475	0.1999	2.786	0.2267	0.0934	14	-1.37	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0481	2.550	0.1000	2.786	0.2267	0.0934	14	-1.04	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0416	2.590	0.0000	2.786	0.2267	0.0934	14	-0.86	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0510	2.591	0.0354	2.786	0.2267	0.0934	14	-0.86	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0027	2.595	0.0700	2.786	0.2267	0.0934	14	-0.84	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0177	2.721	0.0223	2.786	0.2267	0.0934	14	-0.29	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0324	2.765	0.2700	2.786	0.2267	0.0934	14	-0.09	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0231	2.845	0.1300	2.786	0.2267	0.0934	14	0.26	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0356	2.875	0.2700	2.786	0.2267	0.0934	14	0.39	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0405	2.920	0.1000	2.786	0.2267	0.0934	14	0.59	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0292	2.975	0.0100	2.786	0.2267	0.0934	14	0.83	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0309	3.015	0.0100	2.786	0.2267	0.0934	14	1.01	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0522	3.030	0.0200	2.786	0.2267	0.0934	14	1.08	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0544	3.055	0.0700	2.786	0.2267	0.0934	14	1.19	NA	0
020.20	Total Phosphorus as P2O5, Spectrophotometric ... (%)	0550	2.075	1.650	2.786	0.2267	0.0934	14	-3.14	NA	1
020.40	Total Phosphorus as P2O5, Automated (%)	0096	2.930	0.0000				2			0
020.40	Total Phosphorus as P2O5, Automated (%)	0035	3.245	0.3100				2			0
020.50	Total Phosphorus as P2O5, ICP (%)	0547	1.245	0.0100	2.827	0.2260	0.0566	21	-7.00	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0527	2.570	0.0200	2.827	0.2260	0.0566	21	-1.14	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0234	2.600	0.2000	2.827	0.2260	0.0566	21	-1.00	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0501	2.650	0.1000	2.827	0.2260	0.0566	21	-0.78	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0472	2.660	0.0400	2.827	0.2260	0.0566	21	-0.74	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0552	2.665	0.0300	2.827	0.2260	0.0566	21	-0.72	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0423	2.715	0.1500	2.827	0.2260	0.0566	21	-0.50	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0444	2.740	0.0000	2.827	0.2260	0.0566	21	-0.39	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0482	2.785	0.0100	2.827	0.2260	0.0566	21	-0.19	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0389	2.790	0.0000	2.827	0.2260	0.0566	21	-0.16	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0523	2.800	0.0000	2.827	0.2260	0.0566	21	-0.12	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0524	2.804	0.0905	2.827	0.2260	0.0566	21	-0.10	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0291	2.835	0.0100	2.827	0.2260	0.0566	21	0.04	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0255	2.848	0.0530	2.827	0.2260	0.0566	21	0.09	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0433	2.880	0.0000	2.827	0.2260	0.0566	21	0.23	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0422	2.960	0.0570	2.827	0.2260	0.0566	21	0.59	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0451	3.035	0.0900	2.827	0.2260	0.0566	21	0.92	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0452	3.075	0.0700	2.827	0.2260	0.0566	21	1.10	NA	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
020.50	Total Phosphorus as P2O5, ICP (%)	0483	3.140	0.0000	2.827	0.2260	0.0566	21	1.38	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0516	3.164	0.1590	2.827	0.2260	0.0566	21	1.49	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0042	3.250	0.1000	2.827	0.2260	0.0566	21	1.87	NA	0
020.50	Total Phosphorus as P2O5, ICP (%)	0368	3.315	0.9579	2.827	0.2260	0.0566	21	2.16	NA	1
020.99	Total Phosphorus as P2O5, Other (%)	0515	1.960	0.0069				2			0
020.99	Total Phosphorus as P2O5, Other (%)	0513	2.690	0.0200				2			0
040.20	Indirect Available Phosphorus as P2O5, Spectr... (1%)	0405	2.920	0.1000				1			0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0102	1.850	0.1000	2.441	0.4170	0.0931	4	-1.42		0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0041	2.450	0.2400	2.441	0.4170	0.0931	4	0.02		0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0055	2.695	0.0300	2.441	0.4170	0.0931	4	0.61		0
041.10	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0086	2.769	0.0025	2.441	0.4170	0.0931	4	0.79		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0185	2.650	0.1000	2.735	0.0744	0.0406	5	-1.14		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0485	2.689	0.0529	2.735	0.0744	0.0406	5	-0.62		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0513	2.730	0.0200	2.735	0.0744	0.0406	5	-0.06		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0220	2.760	0.0200	2.735	0.0744	0.0406	5	0.34		0
041.11	Direct Available Phosphorus as P2O5, Gravimet... (1%)	0117	2.845	0.0100	2.735	0.0744	0.0406	5	1.48		0
041.20	Direct Available Phosphorus as P2O5, Spectrop... (1%)	0027	3.075	0.3900				1			0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (1%)	0106	2.640	0.0400	2.742	0.1025	0.0233	3	-0.99		0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (1%)	0544	2.740	0.0000	2.742	0.1025	0.0233	3	-0.02		0
041.21	Direct Available Phosphorus as P2O5, Spectrop... (1%)	0522	2.845	0.0300	2.742	0.1025	0.0233	3	1.01		0
041.50	Direct Available Phosphorus as P2O5, ICP (1%)	0325	2.650	0.1000	2.757	0.0929	0.0333	3	-1.15		0
041.50	Direct Available Phosphorus as P2O5, ICP (1%)	0007	2.800	0.0000	2.757	0.0929	0.0333	3	0.47		0
041.50	Direct Available Phosphorus as P2O5, ICP (1%)	0070	2.820	0.0000	2.757	0.0929	0.0333	3	0.68		0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0423	2.565	0.0700	2.751	0.1194	0.0735	8	-1.43	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0117	2.672	0.1280	2.751	0.1194	0.0735	8	-0.61	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0040	2.700	0.0000	2.751	0.1194	0.0735	8	-0.39	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0377	2.755	0.0500	2.751	0.1194	0.0735	8	0.03	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0043	2.765	0.0900	2.751	0.1194	0.0735	8	0.11	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0025	2.775	0.0300	2.751	0.1194	0.0735	8	0.18	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0360	2.880	0.0800	2.751	0.1194	0.0735	8	0.99	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0023	2.890	0.1400	2.751	0.1194	0.0735	8	1.06	OK	0
041.51	Direct Available Phosphorus as P2O5, ICP, Cit... (1%)	0494	2.610	0.4400	2.751	0.1194	0.0735	8	-1.08	OK	1
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0472	2.520	0.0400	2.910	0.3493	0.0530	9	-1.03	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0486	2.565	0.0100	2.910	0.3493	0.0530	9	-0.91	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0073	2.705	0.0900	2.910	0.3493	0.0530	9	-0.54	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0231	2.760	0.0800	2.910	0.3493	0.0530	9	-0.40	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0043	2.910	0.0600	2.910	0.3493	0.0530	9	0.00	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0354	2.925	0.0300	2.910	0.3493	0.0530	9	0.04	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0055	3.170	0.0000	2.910	0.3493	0.0530	9	0.69	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0029	3.215	0.0700	2.910	0.3493	0.0530	9	0.81	OK	0
041.60	Direct Available Phosphorus as P2O5, Citrate-... (1%)	0034	3.423	0.0970	2.910	0.3493	0.0530	9	1.35	OK	0
041.99	Direct Available Phosphorus as P2O5, Other (1%)	0532	1.150	0.0600	1.937	0.7395	0.1300	5	-1.06		0
041.99	Direct Available Phosphorus as P2O5, Other (1%)	0518	1.270	0.1400	1.937	0.7395	0.1300	5	-0.90		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
041.99	Direct Available Phosphorus as P2O5, Other (1%)	0230	1.905	0.3500	1.937	0.7395	0.1300	5	-0.04		0
041.99	Direct Available Phosphorus as P2O5, Other (1%)	0545	2.585	0.0700	1.937	0.7395	0.1300	5	0.88		0
041.99	Direct Available Phosphorus as P2O5, Other (1%)	0405	2.775	0.0300	1.937	0.7395	0.1300	5	1.13		0
042.10	Water Soluble OrthoP as P2O5, Spectrophotomet... (%)	0553	3.362	0.1015				1			0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0444	2.845	0.0300				2			0
048.50	Water Soluble Phosphorus as P2O5, ICP (%)	0546	2.911	0.0760				2			0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0049	2.790	0.3000	3.496	0.6451	0.1175	12	-1.09	Low	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0102	2.850	0.1000	3.496	0.6451	0.1175	12	-1.00	Low	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0405	2.990	0.0000	3.496	0.6451	0.1175	12	-0.78	Low	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0544	3.105	0.1500	3.496	0.6451	0.1175	12	-0.61	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0055	3.145	0.0700	3.496	0.6451	0.1175	12	-0.54	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0416	3.270	0.0600	3.496	0.6451	0.1175	12	-0.35	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0231	3.435	0.0500	3.496	0.6451	0.1175	12	-0.09	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0494	3.785	0.1500	3.496	0.6451	0.1175	12	0.45	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0220	3.800	0.0400	3.496	0.6451	0.1175	12	0.47	OK	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0522	3.970	0.0000	3.496	0.6451	0.1175	12	0.74	High	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0114	4.345	0.3100	3.496	0.6451	0.1175	12	1.32	High	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0230	4.480	0.1800	3.496	0.6451	0.1175	12	1.53	High	0
050.00	Soluble Potassium as K2O, STPB Oxalate (3%)	0550	2.850	1.680	3.496	0.6451	0.1175	12	-1.00	Low	1
050.30	Soluble Potassium as K2O, AA (Oxalate) (3%)	0309	3.205	0.5300	3.680	0.3178	0.1600	4	-1.49		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (3%)	0040	3.800	0.0000	3.680	0.3178	0.1600	4	0.38		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (3%)	0073	3.855	0.0700	3.680	0.3178	0.1600	4	0.55		0
050.30	Soluble Potassium as K2O, AA (Oxalate) (3%)	0136	3.860	0.0400	3.680	0.3178	0.1600	4	0.57		0
050.31	Soluble Potassium as K2O, AA (Citrate) (3%)	0472	3.750	0.0400				1			0
050.32	Soluble Potassium as K2O, AA (Citrate-EDTA) (3%)	0185	3.875	0.5100				1			0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	0422	3.160	0.2600	3.864	0.3656	0.1139	8	-1.76	Low	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	0292	3.500	0.0000	3.864	0.3656	0.1139	8	-0.91	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	0419	3.805	0.0900	3.864	0.3656	0.1139	8	-0.15	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	0106	3.944	0.0530	3.864	0.3656	0.1139	8	0.20	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	0324	3.950	0.2600	3.864	0.3656	0.1139	8	0.22	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	0086	3.967	0.0680	3.864	0.3656	0.1139	8	0.26	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	0444	4.115	0.0500	3.864	0.3656	0.1139	8	0.63	OK	0
050.50	Soluble Potassium as K2O, ICP (Oxalate) (3%)	0055	4.315	0.1300	3.864	0.3656	0.1139	8	1.13	High	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (3%)	0547	3.445	0.2700	3.897	0.3708	0.0700	6	-1.08	Low	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (3%)	0070	3.650	0.0000	3.897	0.3708	0.0700	6	-0.59	OK	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (3%)	0007	3.800	0.0000	3.897	0.3708	0.0700	6	-0.23	OK	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (3%)	0452	3.990	0.0400	3.897	0.3708	0.0700	6	0.22	OK	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (3%)	0291	4.195	0.0100	3.897	0.3708	0.0700	6	0.72	OK	0
050.51	Soluble Potassium as K2O, ICP (Citrate) (3%)	0483	4.300	0.1000	3.897	0.3708	0.0700	6	0.97	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0494	3.515	0.0700	3.784	0.1755	0.0538	10	-1.43	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0354	3.560	0.0400	3.784	0.1755	0.0538	10	-1.19	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0025	3.670	0.0200	3.784	0.1755	0.0538	10	-0.60	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0485	3.798	0.0050	3.784	0.1755	0.0538	10	0.07	OK	0

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050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0377	3.805	0.1700	3.784	0.1755	0.0538	10	0.11	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0423	3.820	0.0800	3.784	0.1755	0.0538	10	0.19	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0117	3.841	0.1230	3.784	0.1755	0.0538	10	0.30	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0360	3.895	0.0100	3.784	0.1755	0.0538	10	0.59	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0043	3.965	0.0100	3.784	0.1755	0.0538	10	0.96	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0486	3.965	0.0100	3.784	0.1755	0.0538	10	0.96	OK	0
050.52	Soluble Potassium as K2O, ICP (Citrate-EDTA) (3%)	0023	3.635	0.8500	3.784	0.1755	0.0538	10	-0.79	OK	1
050.60	Soluble Potassium as K2O, Flame Photometric (... (3%)	0510	3.022	0.0194				2			0
050.60	Soluble Potassium as K2O, Flame Photometric (... (3%)	0105	3.765	0.0300				2			0
050.61	Soluble Potassium as K2O, Flame Photometric (... (3%)	0035	4.250	1.120				1			0
050.62	Soluble Potassium as K2O, Flame Photometric (... (3%)	0034	3.623	0.1680	3.853	0.1771	0.0820	4	-1.30		0
050.62	Soluble Potassium as K2O, Flame Photometric (... (3%)	0029	3.810	0.0800	3.853	0.1771	0.0820	4	-0.24		0
050.62	Soluble Potassium as K2O, Flame Photometric (... (3%)	0513	3.960	0.0200	3.853	0.1771	0.0820	4	0.60		0
050.62	Soluble Potassium as K2O, Flame Photometric (... (3%)	0095	4.020	0.0600	3.853	0.1771	0.0820	4	0.94		0
050.99	Soluble Potassium as K2O, Other (3%)	0518	3.095	0.3500	3.724	0.3267	0.1017	28	-1.92	Low	0
050.99	Soluble Potassium as K2O, Other (3%)	0532	3.200	0.0800	3.724	0.3267	0.1017	28	-1.60	Low	0
050.99	Soluble Potassium as K2O, Other (3%)	0481	3.250	0.1000	3.724	0.3267	0.1017	28	-1.45	Low	0
050.99	Soluble Potassium as K2O, Other (3%)	0552	3.250	0.0600	3.724	0.3267	0.1017	28	-1.45	Low	0
050.99	Soluble Potassium as K2O, Other (3%)	0501	3.430	0.1200	3.724	0.3267	0.1017	28	-0.90	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0493	3.450	0.1000	3.724	0.3267	0.1017	28	-0.84	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0234	3.500	0.2000	3.724	0.3267	0.1017	28	-0.68	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0476	3.595	0.0360	3.724	0.3267	0.1017	28	-0.40	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0096	3.615	0.0500	3.724	0.3267	0.1017	28	-0.33	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0482	3.620	0.0800	3.724	0.3267	0.1017	28	-0.32	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0553	3.627	0.0603	3.724	0.3267	0.1017	28	-0.30	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0027	3.648	0.1600	3.724	0.3267	0.1017	28	-0.23	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0527	3.709	0.0036	3.724	0.3267	0.1017	28	-0.04	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0255	3.732	0.3840	3.724	0.3267	0.1017	28	0.03	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0325	3.750	0.3000	3.724	0.3267	0.1017	28	0.08	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0433	3.750	0.0000	3.724	0.3267	0.1017	28	0.08	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0545	3.785	0.0300	3.724	0.3267	0.1017	28	0.19	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0368	3.798	0.0511	3.724	0.3267	0.1017	28	0.23	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0523	3.900	0.0000	3.724	0.3267	0.1017	28	0.54	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0177	3.903	0.0190	3.724	0.3267	0.1017	28	0.55	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0042	3.950	0.1000	3.724	0.3267	0.1017	28	0.69	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0451	3.970	0.0400	3.724	0.3267	0.1017	28	0.75	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0389	3.980	0.0400	3.724	0.3267	0.1017	28	0.78	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0546	4.004	0.1130	3.724	0.3267	0.1017	28	0.86	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0540	4.100	0.2000	3.724	0.3267	0.1017	28	1.15	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0516	4.114	0.0320	3.724	0.3267	0.1017	28	1.20	OK	0
050.99	Soluble Potassium as K2O, Other (3%)	0535	4.150	0.1000	3.724	0.3267	0.1017	28	1.31	High	0
050.99	Soluble Potassium as K2O, Other (3%)	0524	4.402	0.0376	3.724	0.3267	0.1017	28	2.08	High	0
101.00	Acid Soluble Calcium, AA, inorganic 965.09 (1%)	0550	2.095	0.4300				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
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101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0255	1.160	0.1060	1.338	0.0505	0.0459	14	-3.52	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0482	1.270	0.0200	1.338	0.0505	0.0459	14	-1.34	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0234	1.300	0.2000	1.338	0.0505	0.0459	14	-0.75	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0102	1.320	0.0000	1.338	0.0505	0.0459	14	-0.35	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0433	1.325	0.0060	1.338	0.0505	0.0459	14	-0.25	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0360	1.330	0.0000	1.338	0.0505	0.0459	14	-0.15	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0035	1.335	0.0300	1.338	0.0505	0.0459	14	-0.06	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0354	1.335	0.0100	1.338	0.0505	0.0459	14	-0.06	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0444	1.340	0.0800	1.338	0.0505	0.0459	14	0.04	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0096	1.355	0.0100	1.338	0.0505	0.0459	14	0.34	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0472	1.355	0.0100	1.338	0.0505	0.0459	14	0.34	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0452	1.375	0.0300	1.338	0.0505	0.0459	14	0.74	OK	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0483	1.705	0.0900	1.338	0.0505	0.0459	14	7.27	High	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0486	1.755	0.0500	1.338	0.0505	0.0459	14	8.26	High	0
101.30	Acid Soluble Calcium, ICP, test portion inorg... (1%)	0041	1.610	0.3600	1.338	0.0505	0.0459	14	5.39	High	1
101.31	Acid Soluble Calcium, ICP, test portion organ... (1%)	0231	1.310	0.0400				1			0
101.32	Acid Soluble Calcium, ICP, test portion 2006.... (1%)	0423	1.436	0.0710				1			0
101.33	Acid Soluble Calcium, ICP, 2017.02 (1%)	0177	1.250	0.0139	1.335	0.0892	0.0293	7	-0.86	OK	0
101.33	Acid Soluble Calcium, ICP, 2017.02 (1%)	0136	1.265	0.0100	1.335	0.0892	0.0293	7	-0.71	OK	0
101.33	Acid Soluble Calcium, ICP, 2017.02 (1%)	0117	1.277	0.0230	1.335	0.0892	0.0293	7	-0.59	OK	0
101.33	Acid Soluble Calcium, ICP, 2017.02 (1%)	0527	1.316	0.0237	1.335	0.0892	0.0293	7	-0.19	OK	0
101.33	Acid Soluble Calcium, ICP, 2017.02 (1%)	0494	1.363	0.0024	1.335	0.0892	0.0293	7	0.28	OK	0
101.33	Acid Soluble Calcium, ICP, 2017.02 (1%)	0043	1.430	0.1000	1.335	0.0892	0.0293	7	0.97	OK	0
101.33	Acid Soluble Calcium, ICP, 2017.02 (1%)	0037	1.442	0.0320	1.335	0.0892	0.0293	7	1.09	OK	0
101.99	Acid Soluble Calcium, Other (1%)	0476	1.242	0.0699	1.295	0.0529	0.0437	6	-0.90	OK	0
101.99	Acid Soluble Calcium, Other (1%)	0368	1.265	0.0320	1.295	0.0529	0.0437	6	-0.50	OK	0
101.99	Acid Soluble Calcium, Other (1%)	0552	1.275	0.0300	1.295	0.0529	0.0437	6	-0.34	OK	0
101.99	Acid Soluble Calcium, Other (1%)	0481	1.300	0.0000	1.295	0.0529	0.0437	6	0.08	OK	0
101.99	Acid Soluble Calcium, Other (1%)	0389	1.315	0.0300	1.295	0.0529	0.0437	6	0.33	OK	0
101.99	Acid Soluble Calcium, Other (1%)	0523	1.550	0.1000	1.295	0.0529	0.0437	6	4.29	OK	0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.5%)	0513	0.6550	0.0100				2			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.5%)	0550	0.8025	0.0870				2			0
121.00	Acid Soluble Magnesium, AA, inorganic 965.09 ... (0.5%)	0516	0.0000	0.0000				2			4
121.01	Acid Soluble Magnesium, AA, organic 965.09 (0.5%)	0309	0.1400	0.0000				1			0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0433	0.5920	0.0020	0.6624	0.0685	0.0141	15	-1.03	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0444	0.6050	0.0100	0.6624	0.0685	0.0141	15	-0.84	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0482	0.6050	0.0100	0.6624	0.0685	0.0141	15	-0.84	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0102	0.6200	0.0000	0.6624	0.0685	0.0141	15	-0.62	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0360	0.6245	0.0090	0.6624	0.0685	0.0141	15	-0.55	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0035	0.6350	0.0600	0.6624	0.0685	0.0141	15	-0.40	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0096	0.6350	0.0100	0.6624	0.0685	0.0141	15	-0.40	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0234	0.6400	0.0200	0.6624	0.0685	0.0141	15	-0.33	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0354	0.6450	0.0100	0.6624	0.0685	0.0141	15	-0.25	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0041	0.6600	0.0200	0.6624	0.0685	0.0141	15	-0.04	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0231	0.6600	0.0200	0.6624	0.0685	0.0141	15	-0.04	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0255	0.7350	0.0300	0.6624	0.0685	0.0141	15	1.06	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0452	0.7550	0.0100	0.6624	0.0685	0.0141	15	1.35	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0472	0.7600	0.0000	0.6624	0.0685	0.0141	15	1.43	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0483	0.8565	0.0010	0.6624	0.0685	0.0141	15	2.83	OK	0
121.30	Acid Soluble Magnesium, ICP, test portion ino... (0.5%)	0114	0.6200	0.1400	0.6624	0.0685	0.0141	15	-0.62	OK	1
121.32	Acid Soluble Magnesium, ICP, test portion 200... (0.5%)	0423	0.6450	0.0100				1			0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0486	0.6000	0.0000	0.6421	0.0336	0.0113	9	-1.16	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0117	0.6120	0.0141	0.6421	0.0336	0.0113	9	-0.83	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0043	0.6250	0.0100	0.6421	0.0336	0.0113	9	-0.47	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0177	0.6318	0.0112	0.6421	0.0336	0.0113	9	-0.28	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0136	0.6400	0.0200	0.6421	0.0336	0.0113	9	-0.06	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0494	0.6408	0.0117	0.6421	0.0336	0.0113	9	-0.04	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0037	0.6655	0.0090	0.6421	0.0336	0.0113	9	0.64	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0527	0.6714	0.0099	0.6421	0.0336	0.0113	9	0.80	OK	0
121.33	Acid Soluble Magnesium, ICP, 2017.02 (0.5%)	0515	0.9638	0.0160	0.6421	0.0336	0.0113	9	8.83	High	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0476	0.5725	0.0263	0.6591	0.0603	0.0179	9	-1.33	OK	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0368	0.6148	0.0104	0.6591	0.0603	0.0179	9	-0.68	OK	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0027	0.6190	0.0320	0.6591	0.0603	0.0179	9	-0.61	OK	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0524	0.6565	0.0027	0.6591	0.0603	0.0179	9	-0.04	OK	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0552	0.6600	0.0600	0.6591	0.0603	0.0179	9	0.01	OK	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0389	0.6600	0.0000	0.6591	0.0603	0.0179	9	0.01	OK	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0481	0.7000	0.0000	0.6591	0.0603	0.0179	9	0.63	OK	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0523	0.7000	0.0000	0.6591	0.0603	0.0179	9	0.63	OK	0
121.99	Acid Soluble Magnesium, Other (0.5%)	0515	0.9396	0.0299	0.6591	0.0603	0.0179	9	4.29	High	0
131.00	Water Soluble Magnesium, AA (%)	0029	0.5821	0.0453	0.6848	0.1153	0.0426	3	-0.89		0
131.00	Water Soluble Magnesium, AA (%)	0553	0.6628	0.0035	0.6848	0.1153	0.0426	3	-0.19		0
131.00	Water Soluble Magnesium, AA (%)	0550	0.8095	0.0790	0.6848	0.1153	0.0426	3	1.08		0
131.30	Water Soluble Magnesium, ICP (%)	0546	0.6285	0.0030	0.6313	0.0037	0.0093	3	-0.77		0
131.30	Water Soluble Magnesium, ICP (%)	0444	0.6300	0.0200	0.6313	0.0037	0.0093	3	-0.36		0
131.30	Water Soluble Magnesium, ICP (%)	0117	0.6355	0.0050	0.6313	0.0037	0.0093	3	1.13		0
143.99	Elemental Sulfur, Other (%)	0472	2.460	0.0200	2.756	0.3716	0.1133	3	-0.80		0
143.99	Elemental Sulfur, Other (%)	0389	2.635	0.0100	2.756	0.3716	0.1133	3	-0.33		0
143.99	Elemental Sulfur, Other (%)	0255	3.173	0.3100	2.756	0.3716	0.1133	3	1.12		0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0550	2.155	1.030				2			0
145.00	Sulfate Sulfur, HCl soluble, Gravimetric Sulf... (%)	0027	2.420	0.1400				2			0
145.99	Sulfate Sulfur, HCl soluble, Other (%)	0444	2.430	0.0200				1			0
148.00	Total Sulfur, Combustion (2.5%)	0136	2.020	0.0800	2.513	0.2996	0.2322	5	-1.64		0
148.00	Total Sulfur, Combustion (2.5%)	0360	2.511	0.2990	2.513	0.2996	0.2322	5	-0.01		0
148.00	Total Sulfur, Combustion (2.5%)	0451	2.537	0.1210	2.513	0.2996	0.2322	5	0.08		0
148.00	Total Sulfur, Combustion (2.5%)	0114	2.700	0.5200	2.513	0.2996	0.2322	5	0.63		0
148.00	Total Sulfur, Combustion (2.5%)	0029	2.797	0.1410	2.513	0.2996	0.2322	5	0.95		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
148.01	Total Sulfur, Gravimetric - sulfate and elem... (2.5%)	0476	1.435	0.0570	2.156	0.4905	0.0439	7	-1.33	Low	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (2.5%)	0405	1.650	0.1000	2.156	0.4905	0.0439	7	-0.93	Low	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (2.5%)	0029	2.305	0.0100	2.156	0.4905	0.0439	7	0.28	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (2.5%)	0513	2.305	0.0500	2.156	0.4905	0.0439	7	0.28	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (2.5%)	0220	2.365	0.0500	2.156	0.4905	0.0439	7	0.39	OK	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (2.5%)	0095	2.490	0.0000	2.156	0.4905	0.0439	7	0.62	High	0
148.01	Total Sulfur, Gravimetric - sulfate and elem... (2.5%)	0157	2.540	0.0400	2.156	0.4905	0.0439	7	0.71	High	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0444	2.255	0.0300	2.572	0.1947	0.0335	10	-1.52	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0486	2.340	0.0000	2.572	0.1947	0.0335	10	-1.11	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0102	2.520	0.0000	2.572	0.1947	0.0335	10	-0.25	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0037	2.539	0.0250	2.572	0.1947	0.0335	10	-0.16	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0117	2.543	0.0550	2.572	0.1947	0.0335	10	-0.14	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0177	2.609	0.0267	2.572	0.1947	0.0335	10	0.17	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0494	2.631	0.0088	2.572	0.1947	0.0335	10	0.28	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0527	2.693	0.1691	2.572	0.1947	0.0335	10	0.58	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0231	2.705	0.0100	2.572	0.1947	0.0335	10	0.63	OK	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0483	2.985	0.0100	2.572	0.1947	0.0335	10	1.97	High	0
148.07	Total Sulfur, ICP, test portion as in 2017.02... (2.5%)	0515	2.973	0.8798	2.572	0.1947	0.0335	10	1.91	High	1
148.99	Total Sulfur, Other (2.5%)	0481	1.700	0.0000	2.554	0.3150	0.0338	9	-2.50	Low	0
148.99	Total Sulfur, Other (2.5%)	0096	2.275	0.0100	2.554	0.3150	0.0338	9	-0.82	OK	0
148.99	Total Sulfur, Other (2.5%)	0433	2.325	0.0530	2.554	0.3150	0.0338	9	-0.67	OK	0
148.99	Total Sulfur, Other (2.5%)	0523	2.505	0.0100	2.554	0.3150	0.0338	9	-0.14	OK	0
148.99	Total Sulfur, Other (2.5%)	0368	2.633	0.0409	2.554	0.3150	0.0338	9	0.23	OK	0
148.99	Total Sulfur, Other (2.5%)	0452	2.675	0.0300	2.554	0.3150	0.0338	9	0.35	OK	0
148.99	Total Sulfur, Other (2.5%)	0482	2.765	0.0700	2.554	0.3150	0.0338	9	0.62	OK	0
148.99	Total Sulfur, Other (2.5%)	0553	2.831	0.0501	2.554	0.3150	0.0338	9	0.81	OK	0
148.99	Total Sulfur, Other (2.5%)	0354	2.900	0.0400	2.554	0.3150	0.0338	9	1.01	High	0
149.04	Sulfur - HNO3 soluble, ICP (%)	0423	2.605	0.0300	2.672	0.1032	0.0228	3	-0.65		0
149.04	Sulfur - HNO3 soluble, ICP (%)	0043	2.620	0.0000	2.672	0.1032	0.0228	3	-0.50		0
149.04	Sulfur - HNO3 soluble, ICP (%)	0524	2.791	0.0383	2.672	0.1032	0.0228	3	1.15		0
151.00	Acid Soluble Arsenic , AA, test portion 2006... (ppm)	0550	0.1175	0.0030				2			0
151.00	Acid Soluble Arsenic , AA, test portion 2006... (ppm)	0136	0.4200	0.0600				2			0
151.30	Acid Soluble Arsenic , ICP (ppm)	0255	0.7155	0.3270				1			0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0527	1.285	0.9900				2			0
151.33	Acid Soluble Arsenic , ICP, 2017.02 (ppm)	0515	1.671	0.1110				2			0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0368	1.879	0.1732				2			0
151.34	Acid Soluble Arsenic , ICP, EPA 3050B/6010C (ppm)	0515	2.409	1.968				2			0
151.99	Acid Soluble Arsenic , Other (ppm)	0476	0.5474	0.0095				2			0
151.99	Acid Soluble Arsenic , Other (ppm)	0220	2.000	0.4000				2			0
165.00	Acid Soluble Boron , Spectrophotometric (0.01%)	0550	0.0229	0.0000	0.0273	0.0038	0.0007	3	-1.14		0
165.00	Acid Soluble Boron , Spectrophotometric (0.01%)	0220	0.0290	0.0020	0.0273	0.0038	0.0007	3	0.44		0
165.00	Acid Soluble Boron , Spectrophotometric (0.01%)	0481	0.0300	0.0000	0.0273	0.0038	0.0007	3	0.70		0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.01%)	0136	0.0200	0.0000	0.0225	0.0022	0.0007	8	-1.04	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
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165.30	Acid Soluble Boron , ICP, test portion in 98... (0.01%)	0354	0.0200	0.0000	0.0225	0.0022	0.0007	8	-1.04	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.01%)	0102	0.0215	0.0010	0.0225	0.0022	0.0007	8	-0.41	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.01%)	0043	0.0230	0.0020	0.0225	0.0022	0.0007	8	0.23	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.01%)	0389	0.0230	0.0000	0.0225	0.0022	0.0007	8	0.23	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.01%)	0444	0.0230	0.0000	0.0225	0.0022	0.0007	8	0.23	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.01%)	0433	0.0235	0.0010	0.0225	0.0022	0.0007	8	0.44	OK	0
165.30	Acid Soluble Boron , ICP, test portion in 98... (0.01%)	0494	0.0258	0.0014	0.0225	0.0022	0.0007	8	1.41	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0524	0.0195	0.0001	0.0253	0.0052	0.0202	13	-1.12	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0472	0.0200	0.0000	0.0253	0.0052	0.0202	13	-1.01	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0486	0.0205	0.0010	0.0253	0.0052	0.0202	13	-0.92	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0117	0.0222	0.0006	0.0253	0.0052	0.0202	13	-0.59	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0476	0.0230	0.0007	0.0253	0.0052	0.0202	13	-0.45	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0360	0.0230	0.0000	0.0253	0.0052	0.0202	13	-0.44	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0368	0.0255	0.0005	0.0253	0.0052	0.0202	13	0.03	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0255	0.0255	0.0010	0.0253	0.0052	0.0202	13	0.03	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0527	0.0266	0.0077	0.0253	0.0052	0.0202	13	0.24	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0483	0.0273	0.0007	0.0253	0.0052	0.0202	13	0.37	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0482	0.0300	0.0000	0.0253	0.0052	0.0202	13	0.89	OK	0
165.99	Acid Soluble Boron , Other (0.01%)	0515	0.0331	0.0008	0.0253	0.0052	0.0202	13	1.49	High	0
165.99	Acid Soluble Boron , Other (0.01%)	0552	0.2050	0.2500	0.0253	0.0052	0.0202	13	34.29	High	0
165.99	Acid Soluble Boron , Other (0.01%)	0423	229.1	7.800	0.0253	0.0052	0.0202	13	43721.40	High	2
171.10	Water Soluble Boron , Spectrophotometric (%)	0550	0.0212	0.0000				2			0
171.10	Water Soluble Boron , Spectrophotometric (%)	0553	0.0332	0.0057				2			0
171.99	Water Soluble Boron , Other (%)	0546	0.0221	0.0004	0.0227	0.0005	0.0015	3	-1.15		0
171.99	Water Soluble Boron , Other (%)	0027	0.0230	0.0020	0.0227	0.0005	0.0015	3	0.58		0
171.99	Water Soluble Boron , Other (%)	0444	0.0230	0.0020	0.0227	0.0005	0.0015	3	0.58		0
181.30	Acid Soluble Cadmium , ICP (ppm)	0524	0.0032	0.0028	0.0384	0.0318	0.0009	3	-1.11		0
181.30	Acid Soluble Cadmium , ICP (ppm)	0255	0.0470	0.0000	0.0384	0.0318	0.0009	3	0.27		0
181.30	Acid Soluble Cadmium , ICP (ppm)	0389	0.0650	0.0000	0.0384	0.0318	0.0009	3	0.84		0
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	0527	0.0700	0.0000				2			0
181.33	Acid Soluble Cadmium , ICP, 2017.02 (ppm)	0515	0.7718	1.282				2			0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0515	0.8117	1.431				1			0
181.34	Acid Soluble Cadmium , ICP, EPA 3050B/6010C (ppm)	0368	0.0000	0.0000				1			4
181.99	Acid Soluble Cadmium , Other (ppm)	0220	0.0650	0.0100				1			0
190.00	Water Soluble Chlorine, Titrimetric (%)	0524	46.93	0.6396				1			0
191.00	Acid Soluble Chromium , AA, test portion 200... (ppm)	0550	1.345	0.0300				1			0
191.30	Acid Soluble Chromium , ICP (ppm)	0096	1.450	0.1000	3.439	2.144	0.2775	4	-0.93		0
191.30	Acid Soluble Chromium , ICP (ppm)	0389	1.795	0.0100	3.439	2.144	0.2775	4	-0.77		0
191.30	Acid Soluble Chromium , ICP (ppm)	0035	4.735	0.4500	3.439	2.144	0.2775	4	0.60		0
191.30	Acid Soluble Chromium , ICP (ppm)	0444	5.775	0.5500	3.439	2.144	0.2775	4	1.09		0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0527	1.250	0.0000	3.210	2.719	0.4629	4	-0.72		0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0117	1.523	0.0110	3.210	2.719	0.4629	4	-0.62		0
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0515	2.933	0.6805	3.210	2.719	0.4629	4	-0.10		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
191.33	Acid Soluble Chromium , ICP, 2017.02 (ppm)	0037	7.136	1.160	3.210	2.719	0.4629	4	1.44		0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0368	1.538	0.0501				2			0
191.34	Acid Soluble Chromium , ICP, EPA 3050B/6010C... (ppm)	0515	4.189	2.890				2			0
191.99	Acid Soluble Chromium , Other (ppm)	0476	1.531	0.0006				2			0
191.99	Acid Soluble Chromium , Other (ppm)	0220	2.700	0.2000				2			0
202.30	Acid Soluble Cobalt , ICP (ppm)	0389	0.7500	0.0200				2			0
202.30	Acid Soluble Cobalt , ICP (ppm)	0524	0.9719	0.0697				2			0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0117	0.8875	0.0030	1.108	0.3343	0.1750	4	-0.66		0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0527	0.9500	0.0200	1.108	0.3343	0.1750	4	-0.47		0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0037	0.9900	0.0060	1.108	0.3343	0.1750	4	-0.35		0
202.33	Acid Soluble Cobalt , ICP, 2017.02 (ppm)	0515	1.606	0.6709	1.108	0.3343	0.1750	4	1.49		0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0368	0.7605	0.0819				2			0
202.34	Acid Soluble Cobalt , ICP, EPA 3050B/6010C (ppm)	0515	2.637	2.645				2			0
202.99	Acid Soluble Cobalt , Other (ppm)	0476	0.7799	0.0094	0.9081	0.1693	0.0181	3	-0.76		0
202.99	Acid Soluble Cobalt , Other (ppm)	0255	0.8445	0.0450	0.9081	0.1693	0.0181	3	-0.38		0
202.99	Acid Soluble Cobalt , Other (ppm)	0220	1.100	0.0000	0.9081	0.1693	0.0181	3	1.13		0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0550	0.0011	0.0017				1			0
221.00	Acid Soluble Copper , AA, inorganic 965.09 (%)	0533	0.0000	0.0000				1			4
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0096	0.0023	0.0002	0.0071	0.0065	0.0085	7	-0.67	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0035	0.0025	0.0005	0.0071	0.0065	0.0085	7	-0.64	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0255	0.0030	0.0000	0.0071	0.0065	0.0085	7	-0.57	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0444	0.0035	0.0010	0.0071	0.0065	0.0085	7	-0.50	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0354	0.0100	0.0000	0.0071	0.0065	0.0085	7	0.40	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0483	0.0116	0.0181	0.0071	0.0065	0.0085	7	0.62	OK	0
221.30	Acid Soluble Copper , ICP, test portion inor... (%)	0552	0.0300	0.0400	0.0071	0.0065	0.0085	7	3.18	High	0
221.32	Acid Soluble Copper , ICP, test portion 2006... (%)	0423	69.85	1.300				1			0
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	0527	0.0021	0.0000	0.0024	0.0006	0.0002	4	-0.55		0
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	0117	0.0022	0.0001	0.0024	0.0006	0.0002	4	-0.47		0
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	0494	0.0022	0.0001	0.0024	0.0006	0.0002	4	-0.47		0
221.33	Acid Soluble Copper , ICP, 2017.02 (%)	0515	0.0034	0.0007	0.0024	0.0006	0.0002	4	1.50		0
221.99	Acid Soluble Copper , Other (%)	0476	0.0020	0.0000	0.0024	0.0003	0.0003	6	-1.18	OK	0
221.99	Acid Soluble Copper , Other (%)	0389	0.0022	0.0000	0.0024	0.0003	0.0003	6	-0.50	OK	0
221.99	Acid Soluble Copper , Other (%)	0524	0.0023	0.0000	0.0024	0.0003	0.0003	6	-0.17	OK	0
221.99	Acid Soluble Copper , Other (%)	0220	0.0024	0.0000	0.0024	0.0003	0.0003	6	0.17	OK	0
221.99	Acid Soluble Copper , Other (%)	0523	0.0025	0.0010	0.0024	0.0003	0.0003	6	0.50	OK	0
221.99	Acid Soluble Copper , Other (%)	0515	0.0039	0.0009	0.0024	0.0003	0.0003	6	5.05	OK	0
221.99	Acid Soluble Copper , Other (%)	0368	21.86	0.3777	0.0024	0.0003	0.0003	6	73522.81	High	3
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.05%)	0550	0.0748	0.0356	0.1349	0.0514	0.0161	5	-1.17		0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.05%)	0513	0.0830	0.0020	0.1349	0.0514	0.0161	5	-1.01		0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.05%)	0540	0.1650	0.0300	0.1349	0.0514	0.0161	5	0.59		0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.05%)	0535	0.1750	0.0100	0.1349	0.0514	0.0161	5	0.78		0
241.00	Acid Soluble Iron , AA, inorganic 965.09 (0.05%)	0533	0.1765	0.0030	0.1349	0.0514	0.0161	5	0.81		0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0354	0.0800	0.0000	0.0927	0.0084	0.0049	15	-1.51	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0114	0.0835	0.0050	0.0927	0.0084	0.0049	15	-1.09	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0096	0.0850	0.0100	0.0927	0.0084	0.0049	15	-0.91	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0102	0.0870	0.0020	0.0927	0.0084	0.0049	15	-0.68	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0360	0.0880	0.0000	0.0927	0.0084	0.0049	15	-0.56	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0444	0.0910	0.0040	0.0927	0.0084	0.0049	15	-0.20	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0433	0.0915	0.0010	0.0927	0.0084	0.0049	15	-0.14	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0035	0.0925	0.0050	0.0927	0.0084	0.0049	15	-0.02	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0452	0.0925	0.0010	0.0927	0.0084	0.0049	15	-0.02	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0231	0.0950	0.0100	0.0927	0.0084	0.0049	15	0.27	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0041	0.0955	0.0030	0.0927	0.0084	0.0049	15	0.33	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0483	0.0985	0.0051	0.0927	0.0084	0.0049	15	0.68	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0482	0.1000	0.0000	0.0927	0.0084	0.0049	15	0.87	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0472	0.1050	0.0100	0.0927	0.0084	0.0049	15	1.46	OK	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0255	0.1175	0.0170	0.0927	0.0084	0.0049	15	2.95	High	0
241.30	Acid Soluble Iron , ICP, test portion inorgan... (0.05%)	0552	0.2000	0.1800	0.0927	0.0084	0.0049	15	12.74	High	1
241.32	Acid Soluble Iron , ICP, test portion 2006.03... (0.05%)	0423	929.0	17.00				1			0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	0136	0.0850	0.0100	0.0894	0.0057	0.0043	8	-0.70	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	0527	0.0850	0.0006	0.0894	0.0057	0.0043	8	-0.70	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	0043	0.0865	0.0010	0.0894	0.0057	0.0043	8	-0.47	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	0117	0.0870	0.0023	0.0894	0.0057	0.0043	8	-0.39	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	0486	0.0885	0.0010	0.0894	0.0057	0.0043	8	-0.15	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	0494	0.0889	0.0001	0.0894	0.0057	0.0043	8	-0.09	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	0037	0.0965	0.0010	0.0894	0.0057	0.0043	8	1.13	OK	0
241.33	Acid Soluble Iron , ICP, 2017.02 (0.05%)	0515	0.1388	0.0184	0.0894	0.0057	0.0043	8	7.88	High	0
241.99	Acid Soluble Iron , Other (0.05%)	0476	0.0841	0.0021	0.0909	0.0064	0.0028	7	-0.97	OK	0
241.99	Acid Soluble Iron , Other (0.05%)	0368	0.0877	0.0032	0.0909	0.0064	0.0028	7	-0.46	OK	0
241.99	Acid Soluble Iron , Other (0.05%)	0524	0.0887	0.0022	0.0909	0.0064	0.0028	7	-0.31	OK	0
241.99	Acid Soluble Iron , Other (0.05%)	0523	0.0890	0.0020	0.0909	0.0064	0.0028	7	-0.27	OK	0
241.99	Acid Soluble Iron , Other (0.05%)	0481	0.0900	0.0000	0.0909	0.0064	0.0028	7	-0.13	OK	0
241.99	Acid Soluble Iron , Other (0.05%)	0389	0.0965	0.0010	0.0909	0.0064	0.0028	7	0.79	OK	0
241.99	Acid Soluble Iron , Other (0.05%)	0515	0.1434	0.0089	0.0909	0.0064	0.0028	7	7.44	High	0
251.00	Acid Soluble Lead , AA, test portion 2006.03... (ppm)	0550	0.7960	1.460				1			0
251.30	Acid Soluble Lead , ICP (ppm)	0255	0.0270	0.0300	0.4522	0.7033	0.1311	4	-0.60		0
251.30	Acid Soluble Lead , ICP (ppm)	0389	0.0650	0.0700	0.4522	0.7033	0.1311	4	-0.55		0
251.30	Acid Soluble Lead , ICP (ppm)	0524	0.2168	0.0245	0.4522	0.7033	0.1311	4	-0.33		0
251.30	Acid Soluble Lead , ICP (ppm)	0096	1.500	0.4000	0.4522	0.7033	0.1311	4	1.49		0
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	0527	0.0600	0.0200				1			0
251.33	Acid Soluble Lead , ICP, 2017.02 (ppm)	0515	1.018	2.037				1			4
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0515	1.071	1.436				1			0
251.34	Acid Soluble Lead , ICP, EPA 3050B/6010C (ppm)	0368	0.0455	0.0910				1			4
251.99	Acid Soluble Lead , Other (ppm)	0476	0.1405	0.0485				1			0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.03%)	0540	0.0280	0.0009	0.0303	0.0036	0.0057	4	-0.64		0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.03%)	0535	0.0285	0.0010	0.0303	0.0036	0.0057	4	-0.49		0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.03%)	0533	0.0290	0.0020	0.0303	0.0036	0.0057	4	-0.35		0
261.12	Acid Soluble Manganese , AA, inorganic 965.0... (0.03%)	0550	0.0357	0.0190	0.0303	0.0036	0.0057	4	1.49		0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0114	0.0400	0.0060	0.0444	0.0036	0.0016	9	-1.13	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0354	0.0400	0.0000	0.0444	0.0036	0.0016	9	-1.13	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0433	0.0430	0.0020	0.0444	0.0036	0.0016	9	-0.36	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0035	0.0445	0.0010	0.0444	0.0036	0.0016	9	0.02	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0041	0.0445	0.0010	0.0444	0.0036	0.0016	9	0.02	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0096	0.0445	0.0016	0.0444	0.0036	0.0016	9	0.02	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0102	0.0465	0.0030	0.0444	0.0036	0.0016	9	0.53	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0452	0.0470	0.0000	0.0444	0.0036	0.0016	9	0.65	OK	0
261.30	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0472	0.0500	0.0000	0.0444	0.0036	0.0016	9	1.42	OK	0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0234	0.0400	0.0000	0.0447	0.0050	0.0000	3	-0.93		0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0360	0.0440	0.0000	0.0447	0.0050	0.0000	3	-0.13		0
261.31	Acid Soluble Manganese , ICP, test portion 9... (0.03%)	0482	0.0500	0.0000	0.0447	0.0050	0.0000	3	1.06		0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.03%)	0444	0.0445	0.0030	0.0567	0.0161	0.0195	3	-0.76		0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.03%)	0483	0.0507	0.0054	0.0567	0.0161	0.0195	3	-0.37		0
261.32	Acid Soluble Manganese , ICP, test portion i... (0.03%)	0552	0.0750	0.0500	0.0567	0.0161	0.0195	3	1.13		0
261.33	Acid Soluble Manganese , ICP, test portion o... (0.03%)	0231	0.0500	0.0000				1			0
261.34	Acid Soluble Manganese , ICP, test portion 2... (0.03%)	0423	490.9	10.70				1			0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	0136	0.0400	0.0000	0.0438	0.0026	0.0008	7	-1.29	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	0043	0.0430	0.0000	0.0438	0.0026	0.0008	7	-0.26	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	0117	0.0430	0.0010	0.0438	0.0026	0.0008	7	-0.26	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	0494	0.0434	0.0035	0.0438	0.0026	0.0008	7	-0.14	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	0486	0.0440	0.0000	0.0438	0.0026	0.0008	7	0.08	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	0527	0.0455	0.0002	0.0438	0.0026	0.0008	7	0.59	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	0037	0.0475	0.0010	0.0438	0.0026	0.0008	7	1.28	OK	0
261.35	Acid Soluble Manganese , ICP, 2017.02 (0.03%)	0515	0.0674	0.0136	0.0438	0.0026	0.0008	7	8.09	High	1
261.99	Acid Soluble Manganese , Other (0.03%)	0481	0.0400	0.0000	0.0445	0.0040	0.0008	7	-1.01	OK	0
261.99	Acid Soluble Manganese , Other (0.03%)	0476	0.0402	0.0012	0.0445	0.0040	0.0008	7	-0.96	OK	0
261.99	Acid Soluble Manganese , Other (0.03%)	0524	0.0439	0.0000	0.0445	0.0040	0.0008	7	-0.12	OK	0
261.99	Acid Soluble Manganese , Other (0.03%)	0368	0.0441	0.0023	0.0445	0.0040	0.0008	7	-0.09	OK	0
261.99	Acid Soluble Manganese , Other (0.03%)	0389	0.0460	0.0000	0.0445	0.0040	0.0008	7	0.35	OK	0
261.99	Acid Soluble Manganese , Other (0.03%)	0255	0.0480	0.0020	0.0445	0.0040	0.0008	7	0.81	OK	0
261.99	Acid Soluble Manganese , Other (0.03%)	0523	0.0490	0.0000	0.0445	0.0040	0.0008	7	1.03	OK	0
261.99	Acid Soluble Manganese , Other (0.03%)	0515	0.0740	0.0074	0.0445	0.0040	0.0008	7	6.71	High	1
271.00	Water Soluble Manganese , AA (%)	0550	0.0361	0.0224	0.0405	0.0045	0.0077	3	-0.98		0
271.00	Water Soluble Manganese , AA (%)	0553	0.0403	0.0007	0.0405	0.0045	0.0077	3	-0.04		0
271.00	Water Soluble Manganese , AA (%)	0027	0.0450	0.0000	0.0405	0.0045	0.0077	3	1.02		0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0546	0.0417	0.0001				2			0
271.30	Water Soluble Manganese , ICP, Ext. 972.03 (%)	0444	0.0465	0.0030				2			0
271.99	Water Soluble Manganese , Other (%)	0117	0.0445	0.0002				1			0
281.00	Acid Soluble Mercury , AA (ppm)	0550	0.8965	1.747				1			0
281.30	Acid Soluble Mercury , ICP (ppm)	0527	0.0550	0.0100				1			0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
281.30	Acid Soluble Mercury , ICP (ppm)	0515	0.0000	0.0000				1			4
281.99	Acid Soluble Mercury , Other (ppm)	0009	0.0265	0.0010				2			0
281.99	Acid Soluble Mercury , Other (ppm)	0476	0.1232	0.0080				2			0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0389	0.0510	0.0060	0.4535	0.6915	0.7104	3	-0.58		0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0524	0.0576	0.0193	0.4535	0.6915	0.7104	3	-0.57		0
289.30	Acid Soluble Molybdenum , ICP (ppm)	0255	1.252	2.106	0.4535	0.6915	0.7104	3	1.15		0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0527	0.1500	0.0000	0.2451	0.1498	0.1179	3	-0.63		0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0117	0.1675	0.0130	0.2451	0.1498	0.1179	3	-0.52		0
289.33	Acid Soluble Molybdenum , ICP, 2017.02 (ppm)	0515	0.4177	0.3408	0.2451	0.1498	0.1179	3	1.15		0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (ppm)	0515	1.670	3.269				2			0
289.34	Acid Soluble Molybdenum , ICP, EPA 3050B/601... (ppm)	0368	3.230	1.114				2			0
289.99	Acid Soluble Molybdenum , Other (ppm)	0476	0.1550	0.0239				2			0
289.99	Acid Soluble Molybdenum , Other (ppm)	0220	0.3500	0.1000				2			0
291.00	Acid Soluble Nickel , AA, test portion 2006.... (ppm)	0550	7.669	1.762				1			0
291.30	Acid Soluble Nickel , ICP (ppm)	0524	0.8156	0.2116	1.805	1.304	0.2254	4	-0.76		0
291.30	Acid Soluble Nickel , ICP (ppm)	0389	0.9350	0.0100	1.805	1.304	0.2254	4	-0.67		0
291.30	Acid Soluble Nickel , ICP (ppm)	0035	1.830	0.3600	1.805	1.304	0.2254	4	0.02		0
291.30	Acid Soluble Nickel , ICP (ppm)	0444	3.640	0.3200	1.805	1.304	0.2254	4	1.41		0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0527	1.015	0.0500	1.532	0.6253	0.5010	3	-0.83		0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0037	1.354	0.0740	1.532	0.6253	0.5010	3	-0.28		0
291.33	Acid Soluble Nickel , ICP, 2017.02 (ppm)	0515	2.227	1.379	1.532	0.6253	0.5010	3	1.11		0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0368	2.012	0.0494				2			0
291.34	Acid Soluble Nickel , ICP, EPA 3050B/6010C (ppm)	0515	2.480	1.899				2			0
291.99	Acid Soluble Nickel , Other (ppm)	0220	1.200	0.2000	2.138	1.615	0.2838	3	-0.58		0
291.99	Acid Soluble Nickel , Other (ppm)	0476	1.211	0.0974	2.138	1.615	0.2838	3	-0.57		0
291.99	Acid Soluble Nickel , Other (ppm)	0255	4.003	0.5540	2.138	1.615	0.2838	3	1.15		0
301.30	Acid Soluble Selenium , ICP (ppm)	0524	0.6075	0.2850				1			0
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	0527	1.915	0.0500				1			0
301.33	Acid Soluble Selenium , ICP, 2017.02 (ppm)	0515	0.0000	0.0000				1			4
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0515	3.353	0.5280				1			0
301.34	Acid Soluble Selenium , ICP, EPA 3050B/6010C... (ppm)	0368	0.0000	0.0000				1			4
301.99	Acid Soluble Selenium , Other (ppm)	0220	0.1000	0.0000	0.2582	0.1371	0.0882	3	-1.15		0
301.99	Acid Soluble Selenium , Other (ppm)	0476	0.3316	0.0666	0.2582	0.1371	0.0882	3	0.54		0
301.99	Acid Soluble Selenium , Other (ppm)	0255	0.3430	0.1980	0.2582	0.1371	0.0882	3	0.62		0
311.00	Sodium, AA (0.5%)	0550	1.207	0.7670				1			0
311.30	Sodium, Flame Photometric (0.5%)	0553	1.113	0.0450				1			0
311.32	Sodium, ICP, 2006.03 test portion (0.5%)	0444	1.000	0.0400				2			0
311.32	Sodium, ICP, 2006.03 test portion (0.5%)	0389	1.045	0.0100				2			0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0486	0.9800	0.0200	1.018	0.0395	0.0133	9	-0.88	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0035	0.9825	0.0110	1.018	0.0395	0.0133	9	-0.82	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0546	0.9920	0.0060	1.018	0.0395	0.0133	9	-0.60	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0043	0.9950	0.0100	1.018	0.0395	0.0133	9	-0.53	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0117	1.013	0.0230	1.018	0.0395	0.0133	9	-0.12	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0527	1.020	0.0103	1.018	0.0395	0.0133	9	0.06	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0102	1.040	0.0200	1.018	0.0395	0.0133	9	0.52	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0037	1.061	0.0090	1.018	0.0395	0.0133	9	1.00	OK	0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0452	1.155	0.0100	1.018	0.0395	0.0133	9	3.20	High	0
311.33	Sodium, ICP, test portion as in 2017.02 (0.5%)	0423	1.090	0.0710	1.018	0.0395	0.0133	9	1.67	OK	1
311.99	Sodium, Other (0.5%)	0096	0.9800	0.0400	1.062	0.0740	0.0173	8	-1.02	OK	0
311.99	Sodium, Other (0.5%)	0481	1.000	0.0000	1.062	0.0740	0.0173	8	-0.77	OK	0
311.99	Sodium, Other (0.5%)	0255	1.012	0.0450	1.062	0.0740	0.0173	8	-0.63	OK	0
311.99	Sodium, Other (0.5%)	0482	1.025	0.0100	1.062	0.0740	0.0173	8	-0.46	OK	0
311.99	Sodium, Other (0.5%)	0354	1.090	0.0000	1.062	0.0740	0.0173	8	0.34	OK	0
311.99	Sodium, Other (0.5%)	0513	1.115	0.0100	1.062	0.0740	0.0173	8	0.65	OK	0
311.99	Sodium, Other (0.5%)	0231	1.135	0.0100	1.062	0.0740	0.0173	8	0.90	OK	0
311.99	Sodium, Other (0.5%)	0524	1.142	0.0231	1.062	0.0740	0.0173	8	0.99	OK	0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.01%)	0540	0.0230	0.0040	0.0256	0.0025	0.0022	4	-1.04		0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.01%)	0535	0.0245	0.0010	0.0256	0.0025	0.0022	4	-0.44		0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.01%)	0533	0.0260	0.0020	0.0256	0.0025	0.0022	4	0.17		0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.01%)	0550	0.0289	0.0017	0.0256	0.0025	0.0022	4	1.31		0
321.00	Acid Soluble Zinc , AA, inorganic 965.09 (0.01%)	0516	0.0000	0.0000	0.0256	0.0025	0.0022	4			4
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0354	0.0250	0.0100	0.0283	0.0026	0.0018	16	-1.26	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0433	0.0250	0.0000	0.0283	0.0026	0.0018	16	-1.26	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0035	0.0260	0.0020	0.0283	0.0026	0.0018	16	-0.88	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0360	0.0265	0.0010	0.0283	0.0026	0.0018	16	-0.68	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0102	0.0270	0.0020	0.0283	0.0026	0.0018	16	-0.49	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0114	0.0270	0.0020	0.0283	0.0026	0.0018	16	-0.49	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0444	0.0270	0.0000	0.0283	0.0026	0.0018	16	-0.49	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0096	0.0274	0.0012	0.0283	0.0026	0.0018	16	-0.33	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0452	0.0280	0.0000	0.0283	0.0026	0.0018	16	-0.10	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0255	0.0290	0.0020	0.0283	0.0026	0.0018	16	0.29	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0231	0.0300	0.0000	0.0283	0.0026	0.0018	16	0.67	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0234	0.0300	0.0000	0.0283	0.0026	0.0018	16	0.67	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0472	0.0300	0.0000	0.0283	0.0026	0.0018	16	0.67	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0482	0.0300	0.0000	0.0283	0.0026	0.0018	16	0.67	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0483	0.0333	0.0000	0.0283	0.0026	0.0018	16	1.95	OK	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0041	0.0380	0.0080	0.0283	0.0026	0.0018	16	3.77	High	0
321.30	Acid Soluble Zinc , ICP, test portion inorga... (0.01%)	0552	0.1300	0.0200	0.0283	0.0026	0.0018	16	39.43	High	2
321.32	Acid Soluble Zinc , ICP, test portion 2006.0... (0.01%)	0423	479.0	20.00				1			0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	0527	0.0257	0.0014	0.0279	0.0023	0.0012	8	-0.85	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	0486	0.0260	0.0000	0.0279	0.0023	0.0012	8	-0.73	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	0494	0.0265	0.0005	0.0279	0.0023	0.0012	8	-0.55	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	0117	0.0269	0.0009	0.0279	0.0023	0.0012	8	-0.40	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	0043	0.0275	0.0010	0.0279	0.0023	0.0012	8	-0.14	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	0037	0.0290	0.0020	0.0279	0.0023	0.0012	8	0.45	OK	0
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	0136	0.0300	0.0000	0.0279	0.0023	0.0012	8	0.85	OK	0

Method Code	Analyte Name and Method (Units)	Lab Code	Lab Data		Method Values			# Tests	Magruder CS Z Score	Method IA Status	Flag
			Value	Range	Rob Mean	Rob SD	R-bar				
321.33	Acid Soluble Zinc , ICP, 2017.02 (0.01%)	0515	0.0456	0.0036	0.0279	0.0023	0.0012	8	7.02	High	0
321.99	Acid Soluble Zinc , Other (0.01%)	0220	0.0224	0.0002	0.0277	0.0038	0.0005	8	-1.28	OK	0
321.99	Acid Soluble Zinc , Other (0.01%)	0389	0.0256	0.0003	0.0277	0.0038	0.0005	8	-0.52	OK	0
321.99	Acid Soluble Zinc , Other (0.01%)	0368	0.0260	0.0003	0.0277	0.0038	0.0005	8	-0.43	OK	0
321.99	Acid Soluble Zinc , Other (0.01%)	0476	0.0267	0.0015	0.0277	0.0038	0.0005	8	-0.26	OK	0
321.99	Acid Soluble Zinc , Other (0.01%)	0524	0.0284	0.0001	0.0277	0.0038	0.0005	8	0.15	OK	0
321.99	Acid Soluble Zinc , Other (0.01%)	0523	0.0295	0.0010	0.0277	0.0038	0.0005	8	0.43	OK	0
321.99	Acid Soluble Zinc , Other (0.01%)	0481	0.0300	0.0000	0.0277	0.0038	0.0005	8	0.55	OK	0
321.99	Acid Soluble Zinc , Other (0.01%)	0515	0.0458	0.0005	0.0277	0.0038	0.0005	8	4.34	High	0
321.99	Acid Soluble Zinc , Other (0.01%)	0027	0.0263	0.0038	0.0277	0.0038	0.0005	8	-0.34	OK	1
325.00	Water Soluble Zinc , AA (%)	0027	0.0255	0.0010	0.0273	0.0027	0.0004	3	-0.65		0
325.00	Water Soluble Zinc , AA (%)	0553	0.0259	0.0000	0.0273	0.0027	0.0004	3	-0.50		0
325.00	Water Soluble Zinc , AA (%)	0550	0.0304	0.0002	0.0273	0.0027	0.0004	3	1.15		0
325.30	Water Soluble Zinc , ICP (%)	0117	0.0260	0.0001	0.0267	0.0012	0.0001	3	-0.60		0
325.30	Water Soluble Zinc , ICP (%)	0546	0.0260	0.0002	0.0267	0.0012	0.0001	3	-0.56		0
325.30	Water Soluble Zinc , ICP (%)	0444	0.0280	0.0000	0.0267	0.0012	0.0001	3	1.15		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, 3 = removed from stats, 4 = rejected due to 0s submitted and 5 = LOD. A 9 flag indicates a data problem - scores not calculated. Robust statistics not used if < 6 labs used in calculations, in this case the Z Scores are grey and included for information only. IA Status describes where your result is relative to the Assigned Value ± IA. Red indicates Higher or Lower, Green indicates within the IA range. Method 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.